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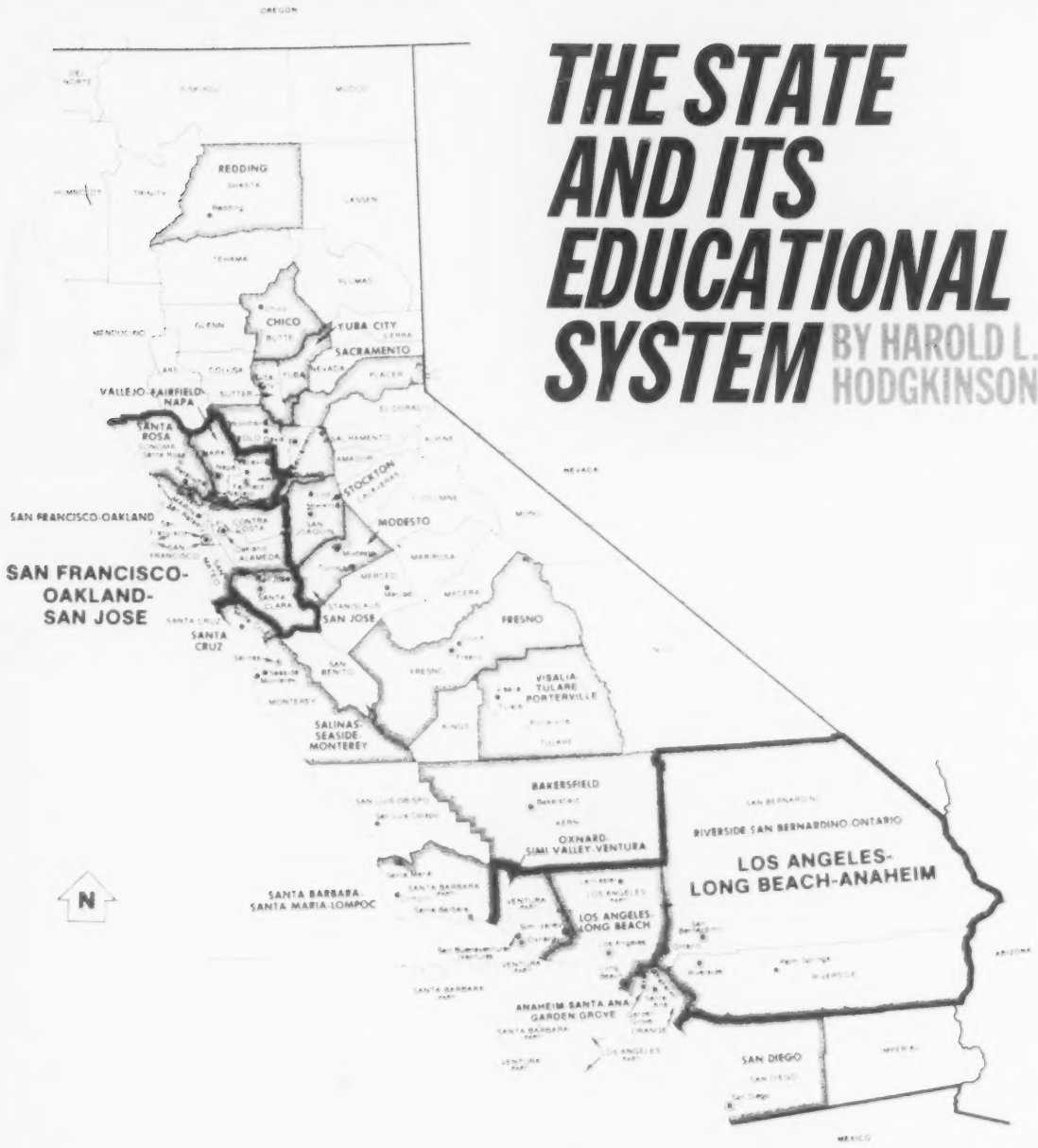
CALIFORNIA:

THE STATE AND ITS EDUCATIONAL SYSTEM

BY HAROLD L. HODGKINSON



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CALIFORNIA:
THE STATE AND ITS EDUCATIONAL SYSTEM

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Errors of fact and interpretation, however, remain the responsibility of the author.

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Cover Note:
This most unusual map of California shows how the state looks demographically. California is the most urban state in the U.S.—95% of its 23 million people live in its 21 metropolitan areas. In thinking about California's future, these areas are the social equals of mountains, rivers and roads on conventional maps. "People Maps" like this one become increasingly important tools for politicians and marketers of products and services.

CALIFORNIA: THE STATE AND ITS EDUCATIONAL SYSTEM

The fact is that one of every nine Americans is a Californian. It would take the population of 60 Alaskas to make one California. The 1982 population of 24,628,000 will move to around 30 million by the year 2000. If California were a nation, it would be one of the ten most powerful in the world on almost any measure. Our population now lives mostly in the East of the country: 50% in the Eastern Time Zone, 30% in Central, only 5% in Mountain, and 14% in Western, almost all of that being California.

With the current uncertainties about Texas, and given the fact that in-migration to that state virtually halted at the end of 1985 due to the state's overwhelming dependence on world oil prices, California, with its diversified economy and population, looks like the state to watch in terms of overall growth. It already represents in human terms what New York did at the turn of the Century—the point of entry for millions who immigrate to the U.S. Two-thirds of the *world's* immigration is to the U.S., which means that California is now accepting almost one-third of the world's immigration, and immigration rates are on the increase. Of course, Texas is still admitting immigrants in large numbers, as is Florida, but the largest number and the greatest cultural diversity will continue to come to California.

As Asian nations continue on their paths to economic and social development, California becomes a natural linkage point for Asian and South American nations just as New York was in the 20's for Europe. The only difference is that when Europeans were migrating to New York, that was the only source of population increase. California is getting both immigration from Asia and South America AND from Indiana and Michigan. Nation-building was the theme for almost everyone immigrating to New York in the 1920's (from Europe); it seems unlikely that most Americans moving from Indiana and Michigan to California are doing so to build a new nation. Indeed, certain U.S. citizens moving to California may represent more of a cultural clash than some folk moving there from Asia or South America. It is our tolerance for diversity which allows us to tap the energies of each new group coming to America to seek a better life, and California does this well.

To get some sense of the size and diversity of the state, let's take a look at the 1980 Census numbers for California, realizing that some of these will be changed in the Census update for 1985:

CALIFORNIA PROFILE

1980 POPULATION:	1st (23,667,000)
BLACK POPULATION:	2nd (1,819,000)
PERCENT BLACK:	21st (7.7%)
HISPANIC POPULATION:	1st (4,544,000)
PERCENT HISPANIC:	3rd (19.2%)
FOREIGN BORN:	1st (15.1%)
PERCENT OVER 65:	34th (10.2%)
PERCENT UNDER 18:	43rd (27%)
MEDIAN AGE:	22nd (29.9 Years)
WOMEN IN LABOR FORCE:	13th (52.4%)
COLLEGE GRADUATES:	8th (19.6%)
MARRIED—COUPLE HOUSEHOLDS:	49th (55.2%)
OWNER—OCCUPIED HOUSING:	48th (55.9%)
MEDIAN HOUSEHOLD INCOME:	10th ($18,243)
HOUSING VALUE:	2nd ($98,700)

This table gives us some picture of the ethnic and socio-economic diversity of California. It is the quintessential Baby-Boom state—very few old and very few young. This means that more workers will be moving into their peak earning years in the next decade, a positive factor in terms of taxes and purchasing power, particularly if the California economy can generate the promotions and new jobs that will be needed. It is also easy to see that the Baby Boomer Californians are delaying long-term commitments to marriage and family, as seen in the small percentage of married-couple households and owner-occupied housing. An educated guess would be that California has more "singles," age 30-40, than any other state. This also helps to explain the *very* low birth rate in California—if it were not for immigration (from other countries) and in-migration (from other states), the California population would actually be decreasing. Fifteen percent of California's population was born in another *country* while 55% was born in another *state*.

The increase in youth entering the early grades of school in 1986 reflects a *small* increase in Baby Boomer births (the so-called Yuppie Puppies), but mainly an increase in high fertility immigrant groups in the state. (The birth rate for whites in the U.S. is now 1.7 children per female, the Hispanic is 2.8. During the Baby Boom, white birth rates went to 3.5 children per female. The problem is a major drop in white fertility, characteristic of California, the U.S., as well as all Western nations—West Germany is now below 1.3. You need 2.1 children just to stay even.)

There are two million children under the age of five in California. A majority of them are non-white, and live in the southern half of the state, where Los Angeles is currently hiring 2,500 new teachers. The Southern California Gas Company—the nation's largest—can tell you how to hook up a gas stove in Chinese, (either Mandarin or Cantonese) Spanish, Korean, Vietnamese and English, all in their *13 million person* service area! Only fifteen percent of Los Angeles school children are caucasian.

Household income is very high considering the diversity of the population. This income level has been created by several factors, particularly the large number of women in the workforce (and two incomes are almost mandatory for a middle-class lifestyle these days), the small number of older people who no longer work, as well as the very large number of people who have directly benefitted from a college degree.

Unlike Colorado, the #1 state in terms of the percentage of population with a college degree, a large number of degree-holders in California earned their degrees in their own state. Colorado is a "net gain" state, in that a large number of their degree-holders earned their degrees in Indiana or Ohio and then moved to Boulder—Ohio pays the bill for the education, and Colorado gets the benefit. In California, a large percentage of the adults with degrees are graduates of the unusually well-developed California system of higher education. Only 6 to 7% of high school graduates in California go out of the state to study—almost 40% do in New Jersey and Connecticut.

In terms of U.S. citizens moving to California, the data from 1975-1980 provide a striking demonstration of the "minority majority" soon to come in the California population:

CALIFORNIA MIGRATION 1975–1980

	ALL	WHITE	HISPANIC	BLACK
IN:	2,898,992	2,010,327	545,906	197,541
OUT:	1,782,831	1,565,038	139,357	100,188
NET:	1,116,161	445,289	406,549	97,353

Some aspects of this chart are very interesting. First, for every 10 whites who move to California about 8 whites leave. For every 10 Hispanics who move in, only 2.5 leave, and for every 10 blacks who move in, 5 move on. The state's future is composed of those who stay, a group remarkably non-white, younger than the white population and much more likely to have children. While the average U.S. white is 31 years old, the average black is 25, the average Hispanic is 22. Birth rates naturally increase the most for the youngest population with the largest number of females in the peak child-producing years.

While 445,289 whites were the "net" addition to California during this five-year period, 503,902 minorities were added. Add to this the current Chicano fertility rate of 2.9 children per female and the white birth rate of 1.7 children per female and the future becomes even clearer, both with in-migration and fertility. Note that this table includes only data on U.S. citizens. If one were to add resident Asian-Americans (a very rapid increase from 3 million in 1980 to 5 million in 1985, predicted at 10 million by 2000) and recent legal immigration, the numbers would be even more suggestive.

Of the current U.S. Asian-American population of 5 million, 1/3, or 1.65 million, live in California. In 1979, all immigrants coming to the U.S. were asked where they intended to establish residence, with California the most popular state (118,000), followed by New York (94,401), Texas (30,520), Florida (26,887), New Jersey (26,465) and Illinois (19,497). Of this entire pool of U.S. immigrants in 1979, 13.2% were from Europe, 41.1% from Asia, 41.9% from Latin America, and only 2.8% from Africa, with about 1% "other."

In the cases of Latin America and Asia, the immigrants are coming from a wider variety of nations, each with distinct cultures. Here is the breakdown for the U.S. Asian-American population as of 1985, when their total numbers were estimated at 5 million but only 3.7 million could be counted:

ASIAN-AMERICAN POPULATION 1985

CHINESE	806,000
FILIPINO	775,000
JAPANESE	701,000
ASIAN INDIAN	362,000
KOREAN	355,000
VIETNAMESE	262,000
HAWAIIANS	167,000
SAMOANS	42,000
GUAMIANS	32,000

It should be clear that these nations do not necessarily enjoy close cultural bonds with each other, and resent being lumped together as "Asians." Similarly, Puerto Ricans, 50% of all Hispanic immigrants to the U.S. in the 1950's, are only 3% today, while Mexicans are 41% of Hispanic immigration and Cubans are 20%. The rest are spread across 16 Latin American nations, including Equador, Dominican Republic, Columbia, Argentina, and more recently Nicaragua and El Salvador. These nations are also not grateful for the label "Hispanic" for the same reasons.

One other point needs to be made about the Asian-American population. According to a Census report on

income by state, the California median family income looked like this in 1983:

CALIFORNIA MEDIAN FAMILY INCOME, 1983

JAPANESE	$27,388
CHINESE	24,409
ASIAN INDIANS	23,722
FILIPINO	23,586
WHITE	22,754
KOREAN	20,713
HISPANICS (ALL)	16,087
BLACK	14,887
VIETNAMESE	11,852

We are not used to thinking about minority groups that make *this* much money! There are several answers—Asian-Americans average three workers per family, about 1/3 of them have a college degree, etc. Even so, Asian-Americans have clearly learned a lesson—hard work pays off in America. Hispanics and blacks also work hard, but they have not yet learned to use education as effectively as have most Asian-Americans.

Not included in our chart are the illegal immigrants to California. The 1980 Census counted two million illegal immigrants, about half from Mexico. The uncounted illegals can be more accurately estimated now than in the 1980 Census, when estimates ranged up to 10 million. There are between 3.5 and 4 million illegals in the U.S. today, according to *American Demographics*, March, 1986. Three-fourths of the illegals live in 12 metro areas, six of which are in California, and only two of which (San Francisco-Oakland and San Jose) are in the Northern half of the state. Adding the 4 million illegals to the legal total of 14 million gives us a current total of 18 million immigrants in the U.S. Although there is some disagreement on whether illegals take jobs away from U.S. citizens, the overwhelming evidence in 1986 suggests that this does not happen. Illegals generally contribute more to the economy than they take away. The only exception is that their children must be educated in America's public schools, creating a major financial drain on the California, Texas and Florida public schools. The number of illegals who "convert" is not known.

In terms of crime, the state does very well, being 6th in murder rate (14.3 per 100,000 population), 3rd in rape (58.2 per 100,000) and 4th in robbery (384 robberies per 100,0000). California's big cities have a far higher crime rate than the state's average, as the table below showing California's 4 largest cities compared to the rest of the 25 largest cities in 1980, will indicate:

CRIME RATE PER 100,000

	MURDER	*RAPE*	*ROBBERY*
LOS ANGELES	7th (34.2)	9th (95.3)	9th (868.3)
SAN FRANCISCO	17th (16.3)	5th (1126)	8th (1116.5)
SAN DIEGO	23rd (11.8)	24th (41.4)	20th (341.3)
SAN JOSE	25th (9.9)	15th (76.3)	24th (272.9)

While the state had a murder rate of 14.3 per 100,000 people, Los Angeles had a rate of 34.2. (St. Louis is now the #1 city for murder, edging out both Cleveland and Detroit.) The state had 384 robberies on average while San Francisco had 1116 per 100,000. (One could infer that virtually everyone in San Francisco makes enough money to make them worth robbing. Criminals are not stupid.)

Particularly interesting is that the state has a very high crime rate, but a very low rate of prisoners per 100,000 population. California ranks 26th in prisoners at 107 per 100,000, compared to North Carolina's #1 score of 256 and New Hampshire's low of 39. The answer to the discrepancy is a mystery—the state ranks 6th, 3rd and 4th on the three major crimes, yet is 26th on prisoners. It may be sheer size—although the rank is low, California had 27,792 prisoners in 1981, and that's a lot of jail space. Why should California be high on crime and low on prisoners while North Carolina is low on crime and #1 on prisoners?

At a more minor criminal level, the state ranks 5th on the percentage of drivers who drive over 55 m.p.h. (61% of California drivers do, while only 27% of Maryland drivers do. Apparently police watch us from airplanes even when they don't arrest us, and the numbers are quite reliable.) Even with all this speeding, California drops to 19th in traffic fatalities per mile, due largely to the excellent highway safety engineering in the state. It may also be that when gridlock happens on the freeway and nothing with four wheels is moving, it's pretty safe in the car.

As one measure of public citizenship, California ranks 44th in the percentage of voters who actually voted in the 1980 and '84 national elections, averaging 53% of California eligible voters who actually went to the polls. Given the high income and high levels of education in the state, plus relative ease of transportation to the polls, this is somewhat surprising. It may be that Californians aren't that concerned about national politics, or there may be other explanations.

Turning to other issues, the state ranks 5th in abortions per 1,000 live births. For every 1,000 births in California there were 515 abortions. New York leads in this category with 666 abortions per every 1,000 live births, while Mississippi has 96 abortions per 1,000 births. The demographic consequences of this variation are striking indeed. Regardless of the ethical issues surrounding abortion, it is clear that in Mississippi a large number of children are born "at risk"—in poverty, or to teen-age mothers or out of wedlock. A large number of these children will be dependent on state and federal support for most of their lives, drawing money away from other state purposes. The economy of California would be much different if it had the Mississippi ratios; however, we have here at least part of the answer to California's very low birth rate, particularly for whites.

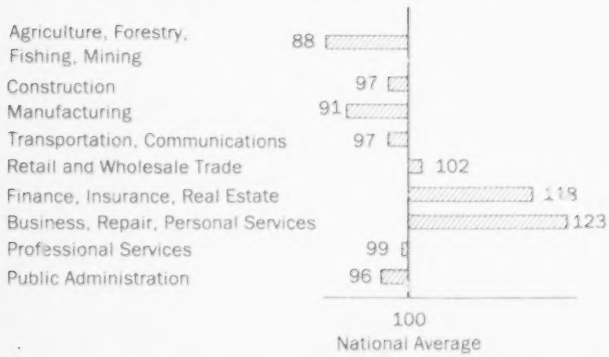
Divorce rates in California are also high—the state ranks 7th, with 615 divorces per every 1,000 marriages. One of the reasons the figure is so much above the national norm of 490 divorces is that there are so many Baby Boomers in California.

The state's rate of venereal disease is also high—7th for syphilis (19.6 cases per 100,000 population), and 13th for gonorrhea (554.7 cases). San Francisco is #1 in syphilis at 153.2 cases per 100,000, and #2 in gonorrhea, a much less serious disease, at 2,810 cases. Atlanta leads in gonorrhea with an astonishing 3,114 cases per 100,000, and is second to San Francisco in syphilis with 138. Other California major cities are much lower on gonorrhea—Los Angeles has 739 and San Diego 400 to San Francisco's 2,810. Data on other social diseases like AIDS are not contained in the 1980 Census, but it would appear that California's case rates for AIDS would also be among the highest in the nation. There are important policy implications behind data like this, but many state leaders would rather talk about the good things and hope that social diseases will go away.

Another clue to these high rates of social diseases is the fact that California is the most "citified" of states—95% of its population live in its 21 metropolitan areas. The largest is, of course, Los Angeles—Long Beach—Anaheim, 7.5 million in the 1980 Census, second only to New York metro with 9.1 million. Santa Cruz was the fast-growing metro area in the 70's with a 52 percent growth rate, while San Francisco was the slowest of the 21 metro areas with a 5% growth rate during the 70's. One way of thinking about urban density is to look at commuter airline schedules—although Easterners think New York-Washington is the most frequent link, and Californians assume it's San Francisco-Los Angeles, they are both wrong. In December, 1980, the most frequently flown route in the U.S. was Dallas—Houston, with 3,462 flights.

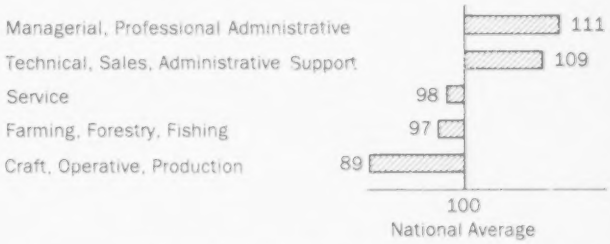
The economy of the state is remarkably diverse, allowing it to ride through recessions that seriously injured states like Michigan, and through rapid fluctuations in oil and gas prices, which have brought growth in Oklahoma and Texas almost to a standstill in 1986. This diversity holds for both occupational categories (what workers do) and industrial categories (what companies and organizations produce). The industrial distribution is remarkably consistent across the categories, with no major weaknesses. In the following distribution, 100 represents the national average in 1980 for that category of industry:

CALIFORNIA INDUSTRY, 1980



Not even New York State can compete with that remarkably high level of consistency. It is the major reason for the state's great economic stability even when the U.S. economy looks like 4.8 on the Richter Scale. When California's $14 billion agricultural economy is in difficulty, it is balanced by its $28 billion defense contract economy. This is not to say that the state is free of economic worries; only that in times of trouble you are better off with a lot of arrows in your quiver than with just one or two.

The workforce is equally diversified:



A word needs to be said about California as the "high tech" center of the U.S. Although the definition is somewhat tricky, California has 22% of the nation's publicly-owned high tech corporations, while 35% are in the Northeast, the largest regional concentration. There are important differences between Silicon Valley high tech and that of Route 128 in Boston. Silicon Valley is more involved in manufacturing (205,000 jobs compared to 152,000 on Route 128). But interestingly enough, the number of jobs in programming and software development in Boston is much higher—25,000 compared to 6,000 in Silicon Valley. As high tech manufacturing becomes more automated (the Apple "Mac" plant in Fremont, California, is a good example—a computer comes off the line every 14 seconds with fewer than 100 workers on the line), jobless growth will be the result in high tech manufacturing just as in autos and farming.

There are also some parallels between the two areas—in both cases, a first-class university engineering school was at the core: Stanford and MIT. Although venture capital seems to ooze out of the ground in both sites, both are plagued with very high housing costs, in Santa Clara as well as Lexington, Mass. It is a transient field, with many workers changing job titles three or more times every year. High tech companies have very high divorce rates on both coasts. In Boston, high tech simply rebuilt the previous manufacturing enterprises, sometimes even locating in old mill plants, while in Santa Clara there was nothing there to rebuild. This may be part of the almost religious fervor with which Californians speak of high tech, while Bostonians see it as just one more among *many* things that comprise their culture.

As long as companies like IBM, Bell Labs and GE concentrate in places like New Jersey, New York and Massachusetts, and virtually every state has at least one major center of high technology, we will again be better off through differentiation and pluralism. It is interesting that the Japanese, known as the "Big Dragon," as well as the "Little Dragons" of Hong Kong, Taiwan, Korea

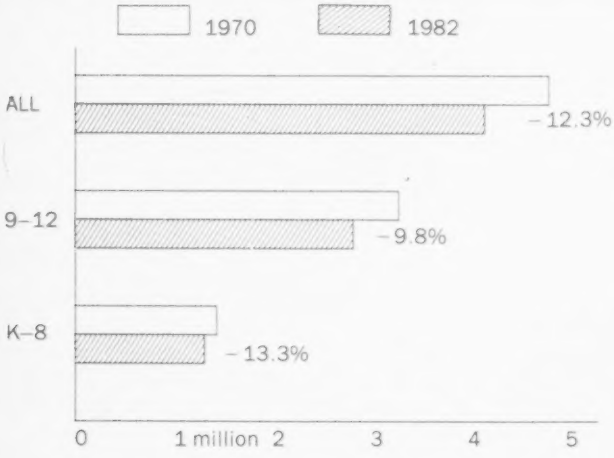
and Singapore, who are so good at so much of high technology, have not been able to develop their own "Silicon Valley—128." Even the direct imitation of Silicon Valley by Taiwan's Hsinchu Industrial Park, located 70 kilometers from Taipei, as well as the Science Park in Singapore, are not very good at the entrepreneurship of ideas.

One of the reasons for the American's success in this venture is that universities and corporations can collaborate with little government interference. In Japan and the Pacific Rim "Little Dragons," little is done without the government, which can be very useful in *production* innovations. However, new ideas of a more generic sort often come from individuals and small groups "fooling around"—an activity which few governments appreciate. (Indeed, one of the major motivations of innovators may be the desire to get around governments.)

Having dealt with a few conditions affecting this large and complex state, let's look more directly at the educational system in California, beginning with the public schools. To get a sense of the magnitude of the venture, the following shows numbers enrolled in the schools through time:

CALIFORNIA SCHOOL ENROLLMENTS:

	1970	1982	NET	U.S.
ALL	4,633,000	4,065,000	-12.3%	-13.6%
GRADES 9-12	1,402,000	1,264,000	-9.8%	-6.2%
GRADES K-8	3,231,000	2,802,000	-13.3%	-16.7%



These numbers are large, and represent rapidly increasing ethnic and cultural diversity as well—public school students in California were only 27.3% minority in 1970 to 42.9% minority in 1980, a 15% increase in one decade. The numbers also mask a major increase in pupils in the early elementary grades. Today, California's elementary schools (tomorrow's college students can be found there today) have a minority majority in the first three grades. These children will grow older (a simple but useful skill) creating a minority majority in all public school enrollments by 1990. This is because high school enrollments will continue to decline even as the heavily minority elementary school populations increase rapidly.

Although all of the 28 largest U.S. cities now have a minority of whites, the data for Los Angeles is particularly striking: non-Hispanic whites are only 15% of the early elementary enrollment while Hispanics are 60%, blacks are 16%, and Asians are about 4% as of Fall, 1985. Total enrollment in the Los Angeles public schools is 547,233 for Fall '85, larger by far than the *combined* total enrollments of the University of California (147,500 students in 1985) and the former state college system, now titled California State University (325,000 students). By 1990, a population as large as the Los Angeles school system will be added to the enrollment in California public schools. It will be even more diverse ethnically than the current school population.

The strategic problem the state confronts is something like this:

- Quality in the public schools, as measured by achievement tests, has been declining for more than a decade, as has funding.
- Although the data for drop-outs are not perfect, California ranks about 40th in retaining young people to high school graduation. For a state that is 8th in college graduates and very high in per capita income, the performance is very bad. In 1976 about 76% of kids graduated from high school, 68% did in 1981.
- The rapid increase of half a million students in the schools by 1990 contains a disproportionately large number who do not speak English, are below the poverty line, and have physical and emotional handicaps. The state will have to spend more and do better just to stay even.
- California has the largest class sizes in the nation. Lowering the size of classes is the most expensive task imaginable.
- Recruiting teachers with the diversity of skills necessary to teach this very diverse and growing student body will be very difficult, even with the high level of California teacher salaries.
- Senate Bill 813 and other education reforms of 1982-83 will tighten up curricula, attempt to reduce drop-outs, and increase standards for admission to higher education. Meaningful results of this action will take almost a decade to appear.
- Additional moneys will flow toward the schools, but the largest systems in California will find the increases eaten up by expanding numbers of students to be served.
- It is very difficult to increase state ranks during a time when other states are also raising their levels of educational effort.
- The state seems committed to a Brooks Brothers system of higher education for students prepared in Robert Hall schools.

The issues of California higher education need to be seen in this kind of a context. The tripartite system of higher education envisioned by the California Master Plan in 1960 was a major development in American higher education in terms of access and choice, as well as quality and cost. Today, the three building blocks look like this:

1. The University of California, now 9 campuses and 147,000 students, is known throughout the world.
2. The California State University educates 325,000 students on its 19 campuses.
3. The California Community Colleges, now educating 1.1 million students on 106 campuses, represent a unique resource, often imitated by other states and seldom appreciated by Sacramento.

The genuis of the Plan was the notion that ability and motivation would be the major factors sought by the system—that race, class, parent's education, sex, even age, would be diminished as predictors of access and success in the higher education system. The dream remains a viable one, but after more than 20 years of the 1960 Plan we must look at the reality as well. It is clear today that race, socio-economic class, and a host of other factors are all of major importance in terms of who participates in higher education, and at what level. One of the things the Master Plan did not foresee was pointed out nicely by David Saxon when he left the Presidency of the University of California in 1983:

> ***By the end of this Century, California is likely to become the first state in the nation whose population is made up predominantly of members of minority groups . . . Intelligent self-interest, the welfare of the nation and justice all demand that we do something to make sure that the young people of the state are qualified for an education at the University of California.***

With one little quibble (Hawaii has had a minority majority for some years now), Saxon's comment is prescient, to say the least. The Master Plan anticipated neither a decade of declining performance in California schools nor a major change in the composition of school populations. What is now entering the early elementary school years is a population that will require additional effort just to stay even with contemporary achievement levels. That additional effort is clearly seen in Senate Bill 813: tightening standards alone will solve nothing until all students have an equal chance of *accomplishing* these higher goals. New organizations like the California Achievement Council are beginning to make some major contributions to our knowledge of how to do this.

In the author's previous work entitled *All One System*, three key decision points were developed for the analysis of the national educational system, and they will be applied to California in this report. They are:

1. The percentage of young people who graduate from high school and become college eligible.
2. The number (and percentage) of those high school graduates who choose to enter college at some level.
3. The number of those entering higher education who complete the programs they start, and those that transfer to other institutions.

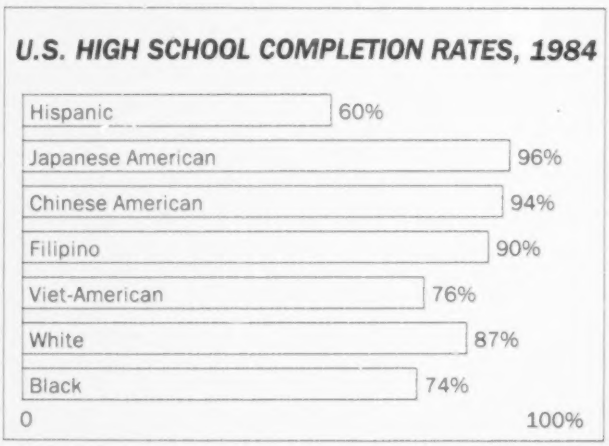
First, it is clear that California has a serious problem in retaining youth to high school graduation. The ethnic and national diversity of the student body is only one part of the problem—students from different countries and backgrounds need individualized attention more than most students, yet California has the largest class size of any state in the nation: 24 students in elementary school classes, 28 in high school classes against a national average of about 18 students. This is the most important single factor in the California equation.

Increased student diversity clearly demands *smaller* classes, not bigger ones. It is very clear that student diversity in California will be greater in the future. It is not humanly possible to teach 30 students in any class at any age if the students speak four different languages not including English. Such classes exist now in California. Even with the current class size, California is facing a major teacher shortage.

To reduce class size to the national average of 18 students, the number of new teachers in the state would have to be doubled, from the California Commission on the Teaching Profession's estimate of 85,000 to about 160,000 new teachers by the end of this decade. The cost of any such venture would be $4 billion dollars annually in teachers' salaries alone (160,000 teachers at $25,000 a year). Additional classroom construction for 160,000 new teachers would build to an incomprehensible figure. Year-round schools and double sessions are only band-aid solutions.

It is against this background that we should consider the figures from the (excellent) *Director's Report of the California Postsecondary Education Commission* for December, 1985:

- One quarter of California's ninth graders do not graduate with their class. The drop-out rate for black and Hispanic youth is 50% higher than for whites. The tracking system in America's public schools ends up with a disproportionate number of poor and minority students in the non-academic tracks, and California is no exception. Much more attention needs to be given to the nature of the "tracks" in public school curricula, as well as the crucial importance of the junior high school experience, as the Director's Report correctly observes.
- On the other hand, the Asian-American population in the U.S. has been called a "model minority" in terms of high school success, according to a Population Reference Bureau report in October, 1985, indicating the following completion rates:



Because one third of all Asian-Americans live in California, these students represent a significant asset—a minority whose youth could be used as examples for others. California needs to think of ways in which the motivations and achievements of this portion of its youth could be transferred to others. Is it the generalized Asian concern for youth success, and of the role of education in achieving personal goals? How do Asian families inculcate these values in their children? We need to know much more about this process, not only for American minorities, but also for whites, as a majority of white California children will be reared by a single parent by their 18th birthday.

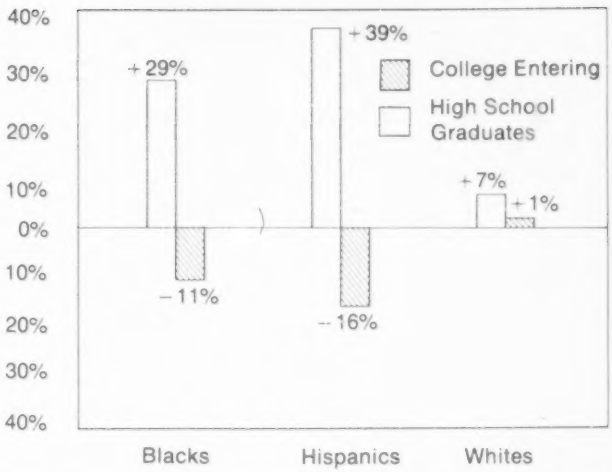
The single factor that distinguishes California's schools is large schools and *large classes*. The only way to lower class size is to hire more teachers. With an expanding elementary school population of great ethnic diversity, more teachers will have to be hired just to "stay even" in terms of class size. This analysis suggests that the most likely consequence of Senate Bill 813 will be a gradual increase in high school graduates capable of college work, with little effect on the graduation rates of the minority and poor populations in the state. In Los Angeles Public Schools, total enrollment is 56,000 in tenth grade and 27,000 in twelfth grade! Twenty-two thousand Hispanics are enrolled in 9th grade, but only 9,000 Hispanics are enrolled in 12th grade. Immigration may be swelling the figures somewhat for the earlier grades, but not by much. Los Angeles enrolls 1/8th of California's 4 million public school students. The situation has reached crisis proportions.

One of the easiest and cheapest remedies is to increase school attendance—if young people go to school every day, their chances of dropping out decline spectacularly. An excellent paper on this topic, *Increasing School Attendance*, was published in February, 1986, by the National School Safety Center in Sacramento. One of the "fringe benefits" of such programs is illustrated by the Rohnert Park Stop and Cite program—as truancy from school went down, daytime burglaries went down by 46%! The economic benefits of school reform are many.

Second, California's ability to "convert" high school students to college students is not great, and the chances are that it will decline in the future. California is reflecting a major national trend in this regard—an increase in minority high school graduates (because they are a rapidly increasing part of the school population), and a rapid decline of the percentage of those graduates who enter college. The chart to the right shows percentage change in the U.S. from 1975 to 1982.

There is a major irony here. During these years, blacks were making progress on the top of the job hierarchy. By 1980, they were 4% of officials and managers, 4.3% of professionals, and 7% of Federal executives. Almost every black person knows some black person who is a lawyer today. Yet, at the very time the doors are opening slightly, minorities are turning away from the college education that is indispensable in moving to the top of the occupational ladder. Is it because of declining certainties of student financial aid? Because the military has worked so successfully on recruiting talented (college eligible) minority high school graduates? Because the bright high school graduate who goes to college loses four years of income and goes into debt "from the top"? No one is certain, but the California experience in this area reflects the national trend in declining minority college enrollment reported by The American Association of State Colleges and Universities in March, 1985.

HIGH SCHOOL GRADUATES AND COLLEGE ENTERING



The situation is especially confounding because by 1980, 68% of working black males were classified as "middle class" in income, and 12% were considered *above* middle-class income levels, according to the Rand Corporation's *Closing the Gap*, published in February, 1986. One assumes that middle-class minorities would certainly extol the virtues of education, and would work hard to ensure their children's success in school. In Los Angeles, 439,000 of the city's 943,000 blacks live in the suburbs, another indicator of middle-class membership. In Oakland, 104,000 of 263,000 blacks are middle class by residence. If this black middle class is to perpetuate itself, its children will have to succeed in the educational system. It may be that middle-class people of any ethnic background cut back on their birth rate.

In California, 13.2% of all public high school graduates in 1983 were eligible for admission to the University of California. But only 3.6% of the black graduates were eligible, and 4.9% of the Hispanic graduates were. Conversely, 26.9% of Asian graduates were admissable, a very high rate indeed. These numbers are reflected in the entering freshman class for October, 1985, at U.C. Berkeley, which was 26.9% Asian-Americans (largest number 10.8% Chinese), 10.6% Hispanic, 7.8% black, and 47.9% white, indicating that the "minority majority" is already present in higher education as well. My impression is that the Berkeley administration has worked very hard to increase black and Hispanic enrollments, but there simply are not enough coming out of the public schools who are qualified.

The State University system is open to the top 1/3 of high school graduates. The increase in black and Hispanic students in the State University was only proportional to the decreased selectivity at admissions at this level—there was no "net gain" in minority participation. Over half of all Hispanic high school graduates in California had the grades required for admission to the State University, but failed to take the tests necessary to assure their eligibility. This suggests some major problems in terms of guidance and counselling in the high schools of California.

In 1983, 262,160 public and private high school graduates were produced in California. Of these, 18,323 attended the University of California as regular or "special" admits, 23,250 were admitted to the State University, 98,390 attended one of the 106 community colleges, while 8,914 attended private institutions of higher education. Only about 5% of these students were out of state for college, which has been characteristic of California (and Texas) for some years. It is vital to see that 84,000 of these high school graduates—one-third—did not go on to *any* college during the year after high school graduation.

Much of the burden resulting from this diversity is falling on the community colleges, which have had to admit a larger number of poorly prepared students, while simultaneously being pushed to produce a higher number of well-qualified graduates who will transfer and feed the University and State University ranks. Remediation is a major endeavor at all three levels of the higher education system; however, it is clear that such efforts are concentrated in the Community Colleges. These institutions are funded on a "per head" basis, unlike the University of California and State University systems which have a level of appropriation regardless of fluctuations in student enrollment.

Given the fact that many advising and tutoring activities do not even generate credit hours, the "coin of the realm" in state funding formulae, and given that the Community Colleges will be forced to expend even more effort on these activities in the future, they may need some extra form of appropriation to allow some administrative stability, given the complexity of their task. (Some of their students are exceptionally good, as good as any in the system, some are of middle ability, and some of their students are not yet high school graduates, with basic skills of writing and math still to be acquired.) Some improvement in funding has appeared for 1986, but it does not seem proportional to the enormous range of tasks the state has asked them to perform.

At the University of California in 1979-80, about half of all new freshmen were enrolled in remedial writing courses—in all, 16% of all English course enrollments were remedial, and 9% of math enrollments were. At the State University, 14% of math enrollments were remedial and about 8-10% of English enrollments were. In the Community Colleges, 45% of all English enrollments were remedial, and 57% of math enrollments were. There is no reason to believe that since 1980 these figures have diminished, and there is some evidence that remediation is taking more course registrations in 1986.

There seems to be a generalized "leveling down" of the Hispanic students in California higher education—if they are qualified for the University, they go to the State University, if they are eligible for that, many go to Community College. Asian students, on the other hand, "level up," in the sense that they seem to make sure that they enroll at the highest order of institutions for which they are eligible. Even older Asian students are making their way—of the Asian students in their thirties in community colleges in California, 94% did not graduate from a California high school. Presumably most were recent immigrants, and we know that of Asian immigrants to the U.S., about 30% have already completed a college degree of some sort before they arrived in the U.S. They were "trading" their degrees and knowledge by "leveling up" in our system to the highest degree they could.

It would seem that at the point of entry to higher education, many California students are led astray because of doing the wrong things in high school, not being told of entrance requirements, not taking the requisite tests, etc. Many students seem not to be aware of the mechanics of transfer from one institution or level to another. These things are relatively simple and could be corrected without large additions in funding. Information about the mechanics of higher education in California needs to be shared more comprehensively with colleagues in California's public schools.

Third, it is most important to analyze who gets through the system with the appropriate degree. Admitting minorities and poverty students to higher education is of little use unless they have a reasonable chance of graduating. The "revolving door" college is a cynical idea, suggesting that we admit high-risk students only for their money, after which they go back out the door they so recently used for entrance.

Nationally, a little less than half of the entering students in four-year bachelors degree programs graduate in four years. If you give them six years, the percentage goes up to about 60%. And about 70% graduate from *some* institution before seven years is up. But given the fact that almost half of U.S. students in higher education are part-time, and almost half are over 25 (and it may be the same half!) we may have to rethink what is meant by "normal progress toward the degree." Certainly within California's Community Colleges, "normal progress" has a very different meaning than within the University of California.

Because most top-flight institutions like U.C. are more selective, they have a higher percentage of students who graduate "on time" than the U.S. average. But U.C. is not much higher: 60% graduate within five years, 10% more graduate from U.C. later, and another 10% graduate from some other college or university—the overall performance is about at the national average. Given the selectivity of the University, one can wonder about the quality of the record. (One answer comes from the Institutional Functioning Inventory data on Berkeley—Concern for Undergraduate Learning—U.L.—was about as low as one could find. Faculty do not get promoted because a high percentage of their undergraduates graduate.)

The State University is below the U.C. standards for retention to graduation:only 29% graduate within five years, and another 11-14% may graduate later. This puts the State University below the national average in retention to graduation.

Key to the Master Plan's strategy was the transfer function—"late bloomers" who started at State University could transfer to their rightful place at the University of California, and most important, thousands of rough diamonds entering the community colleges would be able to move up through the institutional levels to their rightful place at the State University or University of California. The truth is that the number of highly able students in the community colleges who are capable of such transfers has declined to less than one quarter of the enrollment, at least on certain measures. However, given the diversity in the state's population, this figure may simply represent a new level of cultural disadvantage which will have to be remedied before the Community Colleges and State University can become the "feeder" originally intended.

We are ready to come full circle—**THERE IS NO WAY IN WHICH THE HIGHER EDUCATION SYSTEM IN CALIFORNIA CAN OPERATE INDEPENDENTLY OF THE PUBLIC SCHOOLS.** With great ethnic and economic diversity, the largest classes in the nation, and a decade of declining achievement scores, the schools represent the well from which higher education must drink. This is as true in Iowa as in California. Although Senate Bill 813 represents some heroic efforts on the part of California's leadership to remedy these problems, it will be some years before these improvements can be systematically relied upon to increase the quality of the entry pool into California higher education.

In addition, employers in California should now be able to see that the quality of their entering workforce will be affected by the success of the *entire* California educational system—the colleges and universities cannot be expected to play "catch-up" if public school achievement levels are falling. (Indeed, during the decade during which SAT scores on high school graduates were falling, GRE scores on *college graduates* were falling at least as fast.) Improving higher education while ignoring public schools is now clearly an impossible task—they are indeed all one system. Recent reports like *Excellence for Whom?* by the California Achievement Council point out that tracking in the very early grades of school creates a self-fulfilling prophecy, especially for poor and minority students. It is difficult for later grades to provide flexibility across these tracks, especially for the junior high years, and especially for poor and minority children.

GENERAL CONCLUSIONS

There is at least partial truth to Richard Armour's bit of verse:

> *Leap with joy, be blithe and gay,*
> *Or weep my friends with sorrow;*
> *What California is today,*
> *The rest will be tomorrow.*

Our earlier analysis of the state's general characteristics suggests that California's future will be unusually dependent upon the ability of the state's educational system to develop the trained and flexible workforce needed for the diversity of businesses that represent the state's major economic advantage. In addition, California's future citizens represent a vast diversity of backgrounds and values, and they will need to be assimilated into the state as citizens and voters as well as workers, a job well done in the past by California's educational system.

There has been a decade or more of "deferred maintenance" on California education. A leaky, neglected roof will let water *in*, a neglected educational system allows human beings to leak *out*. Far too many young people will lead diminished lives in California, not because of a lack of talent and skill, but because the educational system is not responsive to them and allows them to "leak" into poverty and unemployment. Because there is no safety net under the schools, youth can be consigned to a life of inadequacy and dependency because of deferred maintenance.

Some encouraging developments in the last several years suggest that improvement can happen. But the improvements are to some extent piecemeal. Here are a few recommendations that might be useful:

1. There needs to be established an independent body that would be responsible for monitoring the entire educational system in California. Pat Callan's *Director's Report of the Postsecondary Education Commission* is a good step in this direction.

2. The educational level most in need of improvement is clearly one we have neglected in this report—pre-school. The biggest "bang for the buck" in terms of educational improvements at low cost in the U.S. is undoubtedly Head Start. With increasing diversity coming in the California population, *every* California four-year-old should have a positive educational experience, mostly through day-care programs that are educational in nature, and through state-generated programs like Head Start to take care of the very large number of eligible children for whom there are no federal funds.

3. The junior high school is an area in which lots of children begin to "leak out" of the system. Serious state attention needs to be given to the junior high school in California.

4. Information about requirements for college entrance is given too late, and too selectively. It seems not to be followed up by proper counselling in the secondary schools. Many young people are not going to college because of lack of information about what is needed. This is the cheapest way of increasing college students.

5. If the transfer function is truly valued by the state, then the state will have to provide the resources to make it happen, and happen successfully. The Community Colleges, and to a lesser degree the State Universities, have not been given the tools to do the job. The diversity within the state suggests that major provisions need to be made for "late bloomers" and for those who overcome cultural barriers to become high performing students.

6. The budget allocation process in Sacramento needs to reflect this sense that there is a single educational system at work, even though funded in segments. An education "Czar" is clearly *not* the solution. Easier communication between the segments, better data on the entire educational system, more joint hearings, some personnel with cross-cutting responsibilities might be a good first step, even within a segmented budgeting process. Gubernatorial and legislative leadership can make this happen.

7. It would be wonderful if there were an easy way to reduce the size of classes in California's public schools. Unfortunately, no such easy route exists. Diversity by race and class will *increase* in California public schools, making smaller classes even more vital in the future. Attracting excellent teachers to the schools will not work if the odds are stacked against them once they get there. In most surveys, salaries are not as vital as control over working conditions; and for most good teachers, the major "working condition" problem is size *and* diversity of classes. The issue seems to have little public visibility in California as an educational crisis, which it surely is. Public awareness might be a good start. To reduce California public school class size to the national average would require an investment of heroic proportions, probably outside the capability of the state's resources. Class size has slowly crept up in California during the decade of neglect. "Deferred maintenance" does come home to roost.

Although these problems are difficult, the odds clearly favor a future in California of increasing economic stability and growth, along with the *potential* for increasing the fulfillment of the individual citizens who represent the state's most important future resource. If in a decade, the middle-class population of California is proportionately black, Hispanic, and Asian-American, then the state's future is assured, as these groups will be a majority of California's citizens in a few short years. The education system can make it happen.

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CALIFORNIA—SUMMARY OF MAJOR POINTS

1. The state is largest in population, and has the most diverse population, both in ethnic background and through immigration—15% of Californians were born in another country. The state's economy is equally diverse, allowing it to ride through economic fluctuations that would swamp many other states.
2. The state also has very high rates of major crime, divorce, abortion and venereal disease.
3. Many children in California are born "at risk"—into poverty, into homes in which no English is spoken, into life with a physical or emotional handicap, into homes without two caring parents.
4. A majority of Californians will be black, Asian-American, Native American and Hispanic shortly after the year 2000. Non-Latino Caucasians are already a minority of elementary school students in California.
5. By 1990, California public schools will increase by half a million students, many of them "at risk." The State will have to work harder just to "stay even" in terms of educational quality.
6. Public school quality, as measured by achievement test scores, has dropped during more than a decade, as have most measures of school funding. Although retention measures are not perfect, California ranks about 40th in retaining its youth population to the level of high school graduation.
7. The quality of California higher education cannot be much higher than the quality of California public schools. The decade of public school neglect is finally catching up with California higher education.
8. Educational reforms of 1982–83, like Senate Bill 813, will begin to address these problems, but major change in the *system* will take a decade to appear. (Improving the senior year of high school leaves eleven crucial years of educational development untouched.)
9. The three levels of California higher education (community college, state university, University of California) are not currently functioning to increase the participation of minority groups in higher education, particularly in terms of the transfer function from one level to the next.
10. The State needs to pay much more attention to the *entire* educational system in the State, and how each level affects the others. Particularly important are pre-school and junior high, as well as the transfer function in higher education. The budgeting process in Sacramento should reflect these system-wide targets.
11. Dealing with California's current teacher shortage will be easier and cheaper than attempting to reduce the size of classes, which are the nation's largest. Given the ethnic and cultural diversity of California's youth, the state should have the *smallest* classes in the nation if equity were to be achieved.
12. It is time for California's business, political, educational and civic leadership to begin looking at California's total educational system, the people served and the results attained. Little is known about the educational system as a whole. The time to find out is clearly now.

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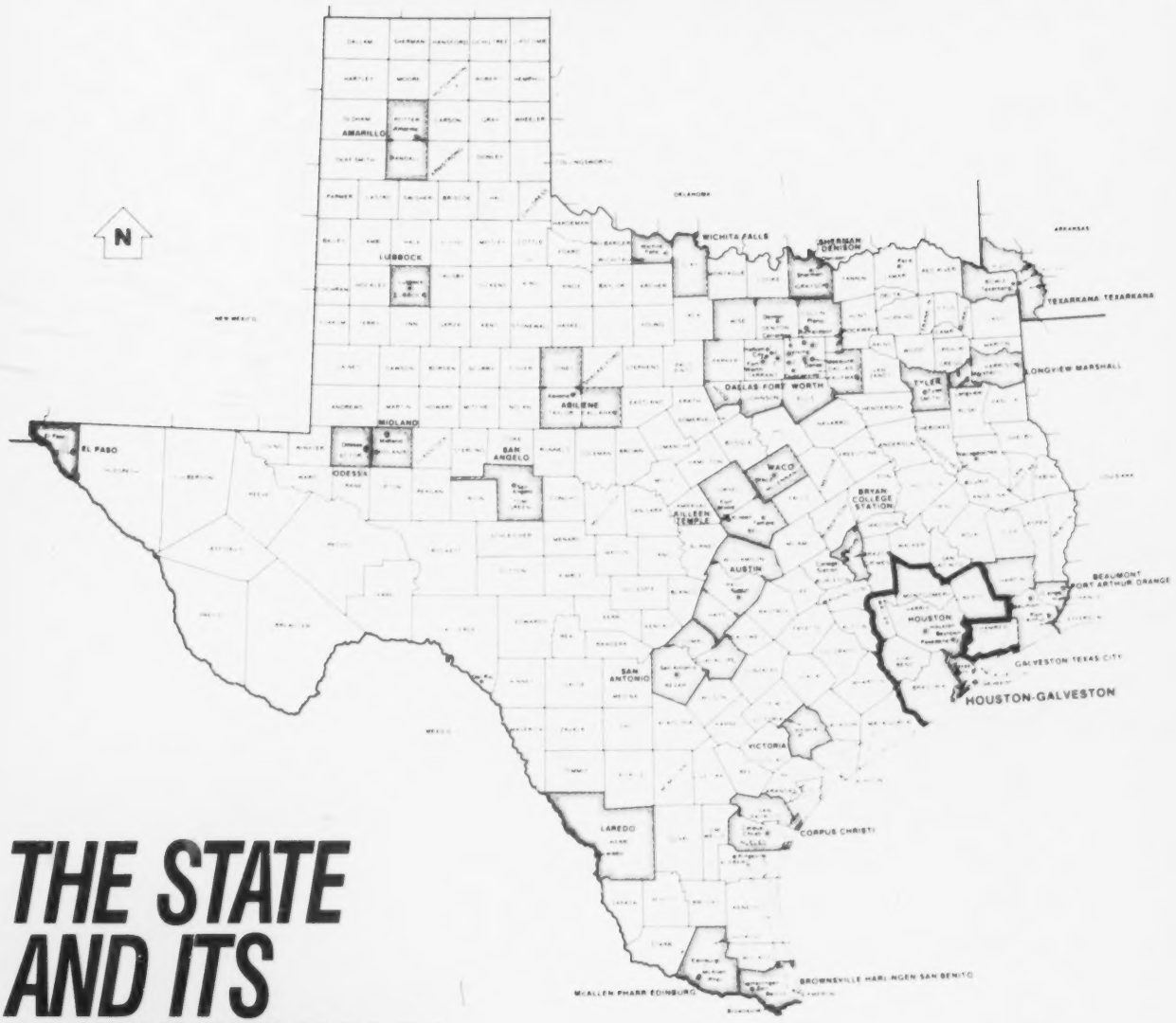
TEXAS:



THE STATE AND ITS EDUCATIONAL SYSTEM

THE INSTITUTE FOR EDUCATIONAL LEADERSHIP, INC.

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The report brings together a wide range of materials having to do with Texas. This diversity could not have been accomplished without a computer program called Super-File, which has been a joy to use. The author's gratitude goes to FYI, Incorporated and the geniuses who made it possible.

Thanks also to The Tomas Rivera Center, The Texas Select Committee on Education, the Texas College and University System Coordinating Board as well as the Office of Minority Affairs of the American Council on Education whose written reports were very helpful in preparing this one. Louise Clarke, Chief Administrative Officer at the Institute for Educational Leadership, was superb in getting the report manufactured.

Errors of fact and interpretation, however, remain the responsibility of the author.

Harold L. Hodgkinson
American Council on Education
Washington, D.C.

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Cover Note:

This most unusual map of Texas shows how the state looks demographically. Texas is a very urban state—80% of its 14 million people live in its 26 metropolitan areas, more Metros than California! In thinking about Texas' future, these areas are the social equivalants of mountains, rivers and roads on conventional maps. "People Maps" like this one are becoming increasingly important tools for politicians and marketers of products and services.

TEXAS:
THE STATE AND ITS EDUCATIONAL SYSTEM

HAROLD L. HODGKINSON
Senior Fellow, ACE

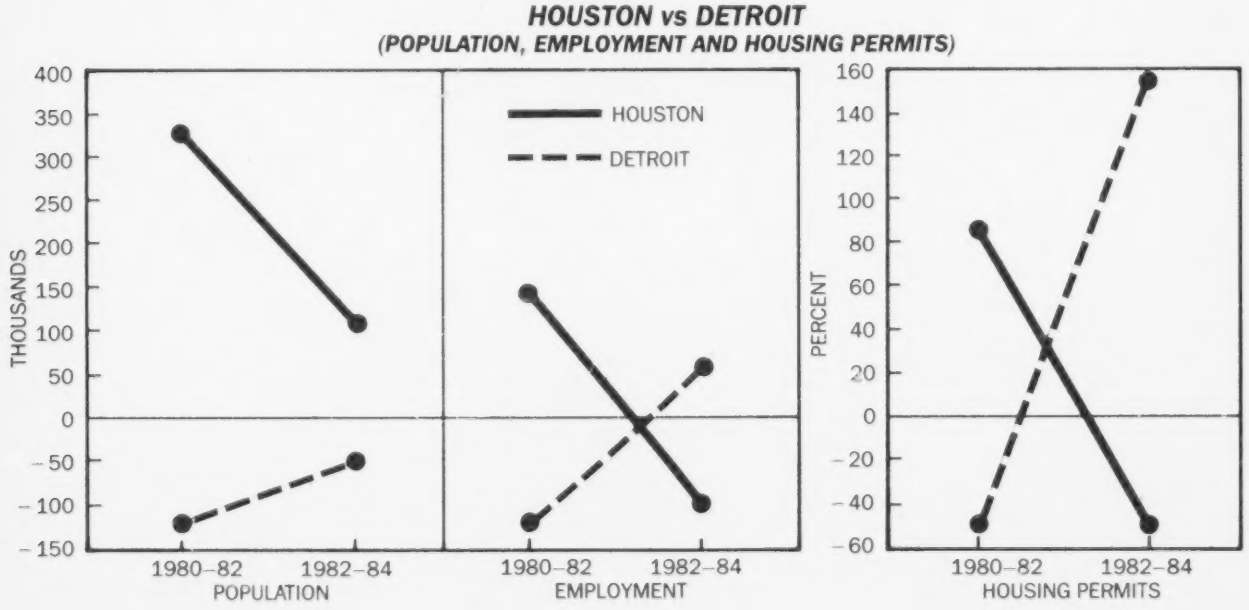
TEXAS: THE STATE AND ITS EDUCATIONAL SYSTEM

There is something schizophrenic about even *trying* to describe Texas—almost everything about the state seems contradictory. If you ask an American to describe the average Texan (not J. R. Ewing), you would probably get an answer straight out of a Marlboro ad—the tall Texas cowpoke riding, alone, into the sunset. This for a state in which 79.6% of its 14 million citizens reside in its *26* metropolitan areas, the largest number of metros in any state! Can we imagine an urban Texas? The cover of this publication suggests that we had better learn.

At the beginning of the Eighties, the futurists (of which this author is definitely *not* a member) were touting a monolithic notion of a "Sunbelt" in which all the action was taking place, and a "Frostbelt" (waggishly referred to as the Rust Bowl) which was nothing but decay and gloom, extending from Michigan to New York. The capital city of the Sunbelt was Houston (the City of Tomorrow), the Frostbelt was exemplified by Detroit (Will the last person out of Detroit please turn out the lights?). It is interesting to track our new key cities during this decade.

There is no doubt that since the publication of books like *Megatrends*, the Sunbelt-Frostbelt notion is in need of drastic revision. In terms of people, jobs, housing starts, and other indicators, Houston is in deep trouble today. (In 1984, 20% of Houston's office space was unrented, and in that year Detroit had 4 times as many industrial building approvals as Houston.)

As this is being written in September, 1986, Texas is $3.5 billion in the hole (the largest state budget deficit in U.S. history), and Ann Richards, the state Treasurer, has said that she will be writing hot checks by December, with no current state money to cover them. Governor White's one-year sales tax proposal and some $580 million in proposed budget cuts would still leave the state $1.5 billion in the red. The cause of all this trouble? Most would say



the rapid decline in world oil prices. A more careful look would produce other factors:

- As the American population ages, beef consumption, a major part of the Texas economy, will continue to decline.
- Although it would be possible, Texas does not "save for a rainy day" when times are good.
- Strategic planning at the state level is not a Texas hallmark.
- Strategic planning at the metro level is not a Texas hallmark.
- Although Texas is a low-tax state on any measure, there is a reluctance to increase taxes to maintain services.

Although much of this material is pessimistic about the future of the Lone Star State, it must be said that the potential for future economic and social development in the state remains, like everything else in the state—vast. However, progress will require (1) a much more diversified economy, (2) a "pay-as-you-go" plan for state services and infrastructure, rather than using present growth to mortgage the future, and (3) much improved possibilities for life fulfillment, particularly through the educational system, for the state's 4.5 million minority citizens.

To begin our analysis, let's look at some basic data from the 1980 Census. The ethnic, socio-economic and cultural diversity behind these numbers is compelling. Minority populations represent 35% of the state's population base, and 46% of its youth. It is vital to the future of Texas that these groups receive the kinds of education that will allow them to achieve their aspirations. (One of the *major* agendas of the state should be the development and nourishment of a significant middle class group for each of its major minorities.) In addition, minorities in public schools in Texas represent not 35 but 46% of Texas youth. Youth tend to grow up (a simple but vital trick), leading to a Texas in 2010 which will contain minority populations of

TEXAS PROFILE

1980 Population	3rd	14,229,191
Black Population	3rd	1,710,175
Percent Black	17th	12%
Hispanic Population	2nd	2,985,824
Percent Hispanic	2nd	21%
Asian American Population	5th	150,000
Percent Asian American	n.a.	1–2%
Foreign Born	11th	6%
Over 65 in Age	38th	9.6%
Under 18	8th	30.3%
Median Age	42nd	28 Years
High School Graduates	42nd	69%
College Graduates	23rd	16.9%
Women in the Work Force	23rd	50.7%
Median Household Income	25th	$16,708
Housing Value	29th	$47,400
Growth Rate, 1970–80	10th	27%

close to 50%, very similar to California. In addition to the semantic problem of what we call minorities when they are half or more of a population, there is also the economic development issue, if Texas continues to rank 42nd in the percentage of its youth who graduate from high school.

Of the 233,357 ninth graders in Texas in 1980, only 161,580, or 69 percent, graduated from high school in 1984. During those years, Minnesota graduated an incredible *96%*. Our largest and most diverse states—Texas, California, New York and Florida, all rank in the bottom 10 states on this crucial measure. These four states alone produced 654,449 of the 2,503,283 high school graduates in 1984, about one quarter of the U.S. total. But this was from their 960,579 ninth graders, meaning that they also produced about *306,130 dropouts!* Although dropout statistics are not totally precise, (they leave out things like interstate migration), the possibility of a third of a million young people moving into adult life without a high school diploma is not a happy one.

The state has a very young population, with relatively few (about 10%) of its citizens over 65. This is due in part to the rapid growth in the state's population during the 70's. (Immigrants tend to be on the young side and tend to have children, particularly minority immigrants.) The hardest, yet most vital, prediction to make about the future of Texas is *whether or not that previous rate of growth will continue for the rest of the decade*. A reasonable guess (based on the 1985 numbers that are available) is that growth will be about half the growth rate of the Seventies. The Hispanic growth rate is bound to increase, due to both immigration and to the high fertility rate of Mexican Americans, currently 2.9 children per female, compared to 1.7 for white females. (Lest this be misunderstood, it must be pointed out that during the Baby Boom, the white fertility rate was 2.9 children. Minority fertility rates are not increasing, white fertility in the U.S. is *decreasing*.)

Another fascinating thing about Texas is the "net" of people moving in and out. This kind of data is almost never mentioned in the media:

TEXAS POPULATION MOVEMENT: 1975–1980

	ALL	WHITE	BLACK	HISPANIC
IN:	1,778,780	1,451,348	132,124	276,600
OUT:	862,230	730,188	67,116	97,702
NET:	+916,550	+721,160	+65,008	+178,898

What these numbers mean is that half as many whites moved out as moved in, and the same for blacks, while only 35% as many Hispanics moved out compared to Hispanics who moved in—Hispanics are *over*represented in the "net" column. They move in, they have children and they STAY. The two broadest "highways" for interstate migration are Texas-California and New York-Florida. Texas-New York (or vice versa) would be "unnatural."

Moving back to our first table, the percentage of the Texas population holding college degrees is quite small, and distributed very unequally in the state (Austin has one of the highest rates of doctoral holders in the country, while other areas of the state are very low on this measure.) Relatively few Texans have benefitted directly from higher education—as with income, Texans are seldom in the middle; they are either rich or poor, well educated or poorly educated. Because a small percentage of Texas women work, household income is depressed. These days, a middle class family almost has to have two wage earners to maintain that level. If housing were not as relatively cheap in Texas as it is, the middle class would be in even deeper trouble.

We also need to get a feel for where in Texas people have been moving. In general, the answer is as American as apple pie—to the suburbs. However, unlike almost all major metro areas in the U.S., which have *declined* in their core city residency while expanding the suburban living, many Texas metros have expanded in both directions:

TEXAS URBAN DEVELOPMENT: 1970–1980

	1970	1980	%
DALLAS:			
ALL	2,377,623	2,974,805	+25.1%
CORE	1,237,856	1,289,242	+ 4.2%
SUBURBAN	1,139,767	1,685,563	+47.9%
HOUSTON:			
ALL	1,999,316	2,905,353	+45.3%
CORE	1,233,535	1,595,138	+29.3%
SUBURBAN	766,781	1,310,215	+71.1%

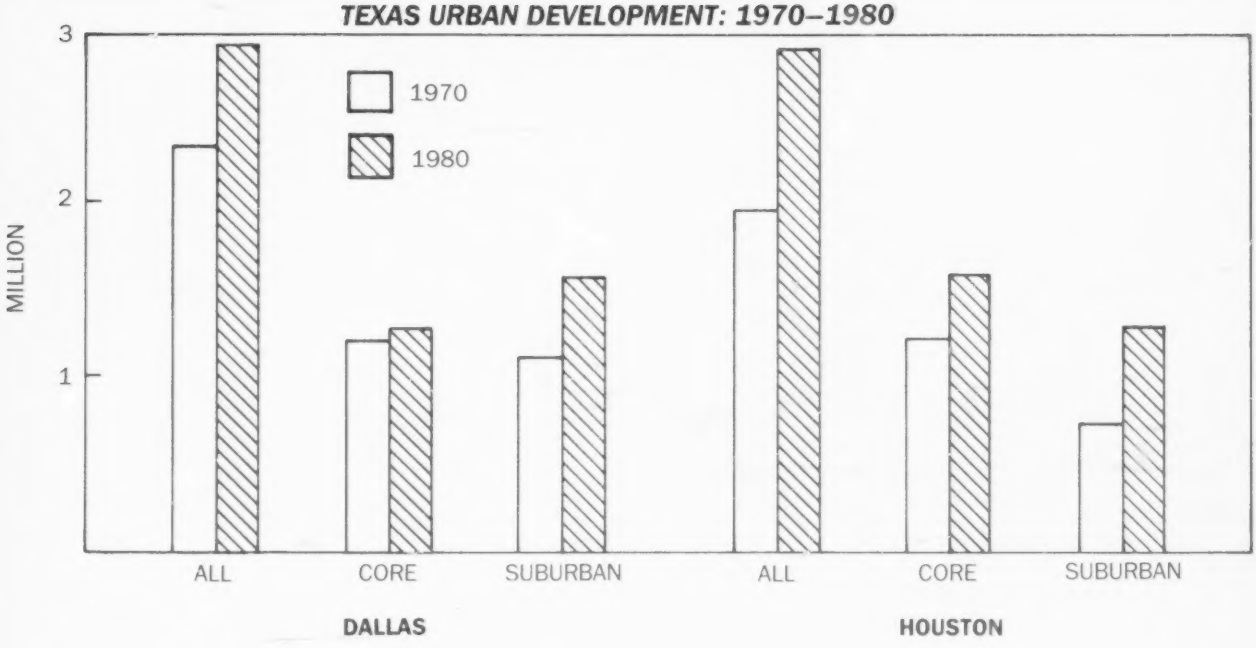
These two cities represent 6 million of Texas' 14 million people. Unlike most other major metros in the U.S., these two have been able to keep the core city growing while at the same time feeding suburban development. It is highly doubtful that the cores can be kept growing in the next decade for our two Texas cities; indeed, the *suburbs* in Dallas and Houston may see some actual declines. We are not used to managing suburbs with shrinking populations.

Another way to think about suburban growth involves the degree to which minorities are able to move to the suburbs, thus establishing one criterion for middle class membership. Using the data prepared for *All One System*, Dallas ranks 14th in the number of blacks who live in its suburbs, while Houston ranks 16th:

BLACK SUBURBAN RESIDENCE

	IN METRO	IN CORE	IN SUBURBS	
DALLAS	313,000	265,000	48,000	15.3%
HOUSTON	513,000	439,000	74,000	14%

TEXAS URBAN DEVELOPMENT: 1970–1980



TEXAS: WORK FORCE AND INDUSTRIES

	% OF WORKERS	INDEX
AGRICULTURE, MINING, FISH, FOREST	6.3%	158
CONSTRUCTION	8.8%	146
MANUFACTURING	17.9%	80
TRANSPORT, COMMUNICATIONS	7.5%	103
RETAIL, WHOLESALE TRADE	21.9%	107
FINANCE, INSURANCE, REAL ESTATE	6.0%	100
BUSINESS, REPAIR, PERSONAL SERVICES	8.8%	105
PROFESSIONAL SERVICES	18.5%	91
PUBLIC ADMINISTRATION	4.5	85

For comparison, 69% of Miami's blacks live in the suburbs while Los Angeles and Atlanta are at 46%. In the study of the black middle class done by the Joint Center for Political Studies in 1986, Houston placed 18th in an index using home ownership and income as a percentage of white income. Dallas didn't make the top 25 in that survey. Unfortunately, there is no parallel data for Hispanics. However, it should be clear that there are large black and Hispanic middle classes in the U.S. today, and that every state needs to nurture their development. Hispanics represent a $60 billion market in the U.S., blacks over $70 billion. With increased expectations on the part of minorities, the nation (and Texas) will have to provide the education and job structure that will allow these expectations to be fulfilled.

At the moment, *political* access seems to be increasing, with 286 black mayors in 1986 in the U.S., and 260 black elected officials in Texas in 1985, according to the Joint Center for Political Studies. The 1986 Rand study, *Closing the Gap*, indicated that 68% of working black males were middle class today, compared with 22% in 1940. Texas also shows 1427 elected Hispanic officials in 1984, the largest number of any state according to the NALEO Education Fund. (The number of Hispanic mayors has not been available.) We also need to point out the major increase in mobility for minorities, especially blacks, via the armed services. For example, in 1982 there were 76 black generals and admirals in the U.S.! One look for black leaders in the faculty club compared to the officers club should be enough to make the point. At the moment, it is not clear that Texas is actively promoting minority mobility through its educational system. The results would suggest otherwise.

At this point, a look at the Texas industrial and job base might be in order. For the chart on page 4, the first column indicates the percentage of the total work force employed in that area; the second indicates the economic output of that industry compared to the rest of the nation (100 being the state average score).

This table is grounds for cautious optimism. Although Texas is *currently* very vulnerable to economic shocks in oil and cattle, the potential for diversification is there. (The secret to California's stability is its diversity—when the state's $14 billion agricultural economy is off, it is buoyed up by the state's incredible *$28 billion* defense contract economy.) Texas has the capacity to build a strong and diverse service economy, particularly in the "high end" of financial, professional, consultation and personal services.

"High tech" is strikingly hard to define (about 20% of all U.S. workers are in high tech *industries*, but only about 3–4% of them do high tech *jobs*, requiring advanced training in electronics—math—technology), but however defined it will not save the Texas economy. High tech *manufacturing* is more characteristic of Silicon Valley, while the Boston 128 corridor runs to R and D. Austin, at present, has a nice blend of both. Alas, during the last oil price slide, computer stocks were sliding as well. The decision to locate the MCC (Microelectronics Computer Technology Consortium) in Austin was a true feather in Texas' cap a few years ago, but now that Bobby Inman has announced his resignation from the leadership of the MCC, and the performance results are at least ambiguous, it may be time for a stock-taking exercise on the future of "high tech" in Texas. Economic diversification would unquestionably be worth the price.

Some other statistical "odds and ends" may help to give the flavor of this complex state. First, the population is far more stable than the stereotypes would have us believe—Texas ranks *25th* in the percentage of citizens who were born in another state. Only 31% of the population moved in. For comparison, in Nevada, 70% of the people were born in another state. Transiency creates its own problems, particularly in terms of crime (Nevada has the highest murder rate per 100,000 citizens of any state, and is the most transient.)

However, Texas has the *second* highest murder rate of any state—16.9 murders per 100,000 population. In addition, three of its cities are in the top 25 in terms of murder: Houston ranks 5th with 39 murders per 100,000, Dallas is 6th with 35 and San Antonio is 14th with a rate of 20. The transiency hypothesis explains this data, but only partially. (The state ranks 7th in rape and 13th in terms of robbery.) Although not a crime *per se*, Texas ranks right behind the leaders in syphilis, Louisiana and Georgia. In terms of auto crime, 64% of Texas highway drivers break the 55 mph limit, making Texas #2. (Many Texans will be chagrined to know that New Mexico is #1 in speeding.) Interestingly, Texas is 10th in auto fatalities—although people speed, they tend to drive in straight lines on good roads. Few people speed in West Virginia, yet the state is 4th in auto fatalities, due to the fact that taking a curve in the West Virginia mountains at 10 miles an hour can cost you your life.

Some social issues are also interesting—Texas ranks 49th for single mothers on welfare. Only 20% of single mothers in Texas are receiving assistance, compared to 80% of Pennsylvania single mothers who get help. As a result, more children are living in poverty in Texas than in most states—of the 529,000 3 and 4 year olds in Texas in 1983, 143,000 of them (or 27%) were below the federal poverty line, according to the March 1984 Current Population Survey. In addition, Texas ranks 6th in births out of wedlock to women under 20 in 1983—34.6% of *all* children born in Texas in 1983 were illegitimate. Out of every 100 babies born in the state, 34 are out of wedlock. White babies born in Texas that year ranked 7th–23.7% were out of wedlock, while black births ranked 5th—77.5% of all black births in 1983 in Texas were to unmarried parents.

Texas ranks 24th in abortions—there were 290 abortions for every 1,000 live births in 1980. For comparison, in New York State there were 666 abortions for every 1,000 live births! If one can hold the ethical issue apart from the social policy issues, it is one more reason that states will become more unlike each other. In addition, in Texas, there are 519 divorces for every 1,000 marriages. Actually, this is a mid-range figure—Arkansas has 864 divorces for every 1,000 marriages!

All of this data suggest a state in which there is more crime than transiency, many sources of emotional instability, including a rapidly shifting family structure, a large minority population that is not achieving middle class membership in large numbers, and a *very* large number of children who are born "at risk," either through poverty or family structure. Restlessness is found in Texans both on the prairie and (for most Texans) in the big city.

Many Texans seem to think of their state as if it were a nation, and their identity seems to be created within the state boundaries. For example, Texas ranks 49th in the percentage of eligible voters who went to the polls in the last national election. Much more political energy seems to be reserved for local and state contests. Only about 7% of its high school graduates go out of the state for college. (In Connecticut, 45% go out of state, while New Jersey loses 39% of its high school graduates to other states for college.) Texas is clearly big enough to absorb most people's total identity. As we have said, it is a state with vast potential, but it has not yet evolved the structure that will assure it a modicum of stability.

Let us now concentrate on the state's educational system, beginning with elementary and secondary schools. Overall, the state's enrollment looks like this:

This analysis makes some things very clear.

- During the Seventies, while U.S. schools were declining in enrollment, Texas showed a steady increase.
- Minority students in Texas public schools in 1986 are a virtual majority.
- Like most states, Texas made progress in teacher salaries and per pupil expenditures, yet almost 20% of Texas children are in poverty.
- Almost 1/3rd of Texas youth begin adult life without a high school diploma, and the recent Texas school reform legislation may *increase* that figure.
- Texas does not like to spend tax money for education, either for teacher salaries or other direct educational expenditures.
- Statewide coordination of the over 1,000 school districts in Texas has not been a major goal, due largely to a lack of willingness to increase state tax dollars for public schools. The state is still 46% state funds, 46% local funds and 8% federal. The October 1986 tax reform legislation will not change the percentages much.

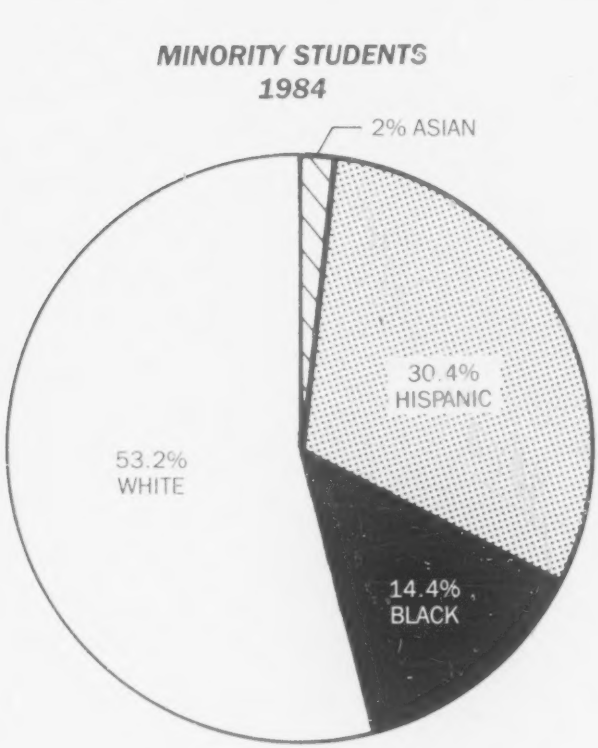
TEXAS SCHOOL ENROLLMENTS: 1970–1982

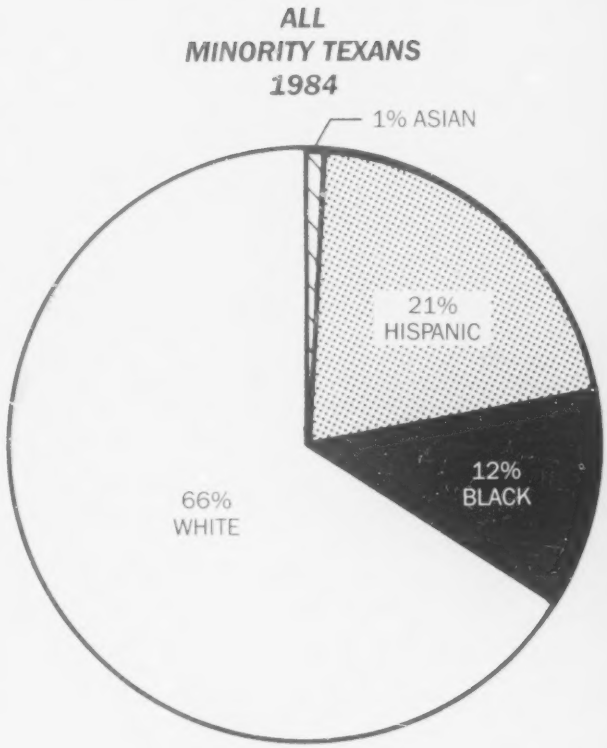
	1970	1982	NET	U.S.
ALL STUDENTS	2,840,000	2,966,000	+ 5.1%	– 13.9%
GRADES 9–12	794,000	836,000	+ 5.3%	– 6.2%
GRADES K–8	2,046,000	2,150,000	+ 5.1%	– 16.7%
	1984–85	**1985–86**		
ALL STUDENTS	3,059,845	3,149,380	+ 89,535	
GRADES 9–12	1,371,965	1,376,253	+ 4,288	
GRADES K–8	1,687,880	1,773,127	+ 85,247	

TEXAS SCHOOL PROFILE

	Date	Ranking	Percent	Amount
High School Graduation Rate	1984	42nd	69%	*
Per Pupil Expenditures	1982	38th	*	$ 2,012
Per Pupil Expenditures	1985–86	*	*	$ 3,384
Teacher Salary	1982	30th	*	$15,715
Teacher Salary	1985–86	*	*	$24,419
Percent of Children age 5–17 in Poverty	1980	*	18.4%	*
Percent of Children Handicapped	1982	*	9.7%	*
Percent Students in Bilingual Programs	1982	*	6.0%	*

*Not Available





THE TEXAS SCHOOL REFORM MOVEMENT

Most of the last paragraph is now up for grabs, due to the massive school reform movement begun with the passage of House Bill 246 in 1981, which centralized curriculum requirements to the point of virtually eliminating local content options. The election of Governor Mark White in 1982 furthered the school reform agenda. Although he had promised teachers more money during the election, the state's economy made that impossible. Rather, a new committee, the Select Committee on Public Education (SCOPE), was created with Ross Perot, a wealthy computer magnate as chair. This committee dealt with far more than its original charge of teacher salaries, looking into virtually every aspect of schools. They concluded that what was needed was a top-down structure that looked like a Fortune 500 company, but which would have political figures at the top.

Out of this effort came the most sweeping legislation in the state's educational history, House Bill 72, passed in a special legislative session in 1984. It can only be described as a "top down" effort—all aspects of curriculum, scheduling, and assessment have now been centralized through a new state board of education, overseen by a watchdog committee of the state legislature called the Legislation Education Board. In point of fact, Texas really now has one school board, and the Legislation Education Board is it. As in a business, this "top management" group will now "run" over 1,000 local school districts, in everything from curriculum to minutes of school attendance per pupil to career ladders to "no pass, no play" and other rules.

In this very thorough reform effort, only one thing was left out—there is no money to pay for it. Even with the October, 1986 passage of a package of tax increases and budget cuts, there is no way House Bill 72 can be fully implemented. The meticulous regulations on teacher testing, career ladders, board training, minutes of instruction per student per teacher per school, *et al.* will require very intensive and "people-intensive" monitoring systems. For example, a second grade teacher is responsible for eight curriculum areas containing 214 "essential elements." For a class of 22 students, that teacher will have to track and report on 22 × 214, or 4708 areas of student progress. One thing is certain--a blizzard of paper will begin to descend upon Austin, and that paper is very expensive in terms of the human time it represents.

It is not at all clear that any state can *regulate* its way to excellence, but Texas is certainly going to try. Of all the 40 state reform efforts, the Texas initiative is based most completely on political structures and motives. Whether it will help existing centers of excellence in Texas public schools become even better (Skyline High in Dallas, Houston's superb work on bilingual teaching) or not is a very big question. Whether the very large Hispanic and black dropout rate can be improved through the reform efforts is perhaps the biggest question, in that it occupies virtually half of the young people who are Texas' future.

TEXAS HIGHER EDUCATION

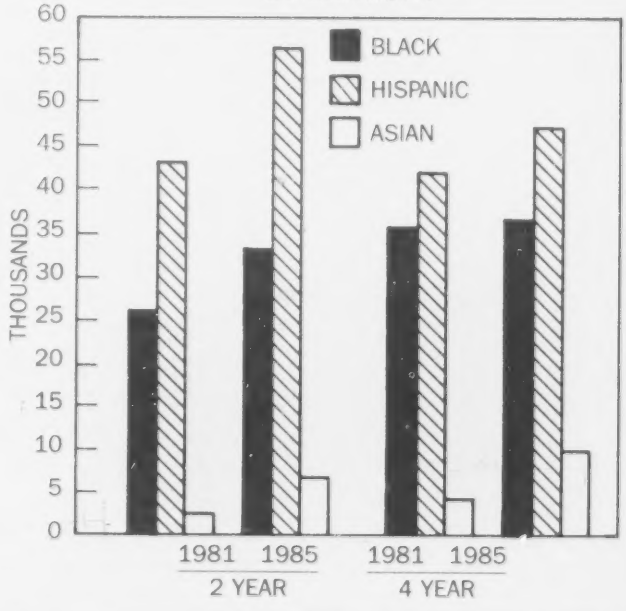
Certainly a good example of a "top down" educational model is the Texas higher education system, with the University of Texas at Austin sitting on the top. If one looks at the number of distinguished scholars, endowed chairs, research grants, endowment, it is very clear that during the "boom" years of the oil industry, a truly great university was created, largely through sheer wealth. Symbolic of this centralization of wealth and status is the Permanent University Fund, now approximately $6 billion dollars worth, which can only be drawn upon by the University of Texas A & M. As of October, 1986, the University of Texas had leaped ahead of Harvard in total asset value for the first time. However, the financial forces that brought the incredible success to the University are now in decline, and it remains to be seen how the University's excellence can be maintained through an era of different state financial dynamics.

The Texas higher education system is more skewed to public institutions than most others—of the 156 postsecondary education institutions of Texas, 98 are public, and only 13 are independent non-profit while 36 are Protestant affiliated and 6 are Catholic. Into these institutions come 716,000 students (as of 1981), 585,000 of them undergraduate, 625,000 into public institutions, 90,000 into independent ones. When we look at the data by race, some clear trends appear:

TEXAS ENROLLMENTS BY ETHNICITY: 1981–1985

	2 YEAR		4 YEAR	
	1981	1985	1981	1985
BLACK	26,104	33,764	35,876	36,770
HISPANIC	43,346	56,587	42,211	47,430
ASIAN	2,674	6,764	4,652	10,042

TEXAS ENROLLMENTS BY ETHNICITY

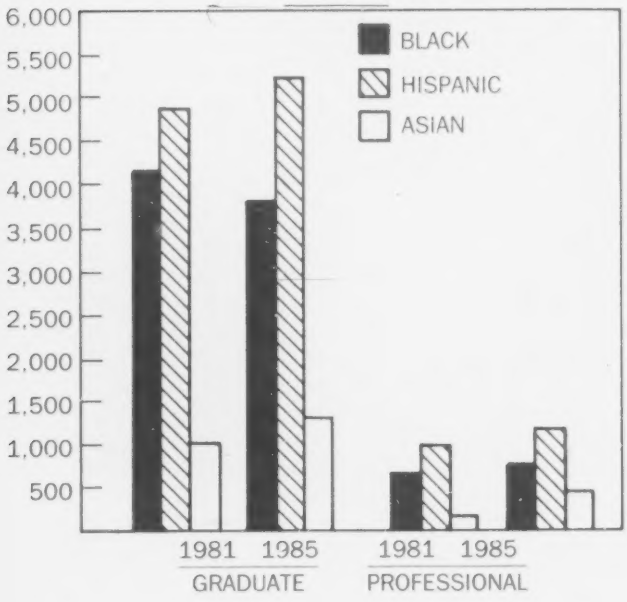


During the period, two-year minority enrollments increased for each group, but spectacularly so for Asian Americans, particularly if the comparison is with the percentage of the state's entire population of Asians. The trend is exactly the same for four-year institutions, especially for the Asian pattern of going to the *highest* level of institution they can be admitted to, while black and Hispanic students tend not to "level up" but to "level down." The best example of "levelling up" is the spectacular data for graduate and professional enrollments in Texas for the same years:

TEXAS GRADUATE ENROLLMENTS BY ETHNICITY: 1981–1985

	GRADUATE		PROFESSIONAL	
	1981	1985	1981	1985
BLACK	4,333	3,818	649	753
HISPANIC	4,874	5,216	995	1,183
ASIAN	1,022	1,397	177	474

TEXAS GRADUATE ENROLLMENTS BY ETHNICITY



Part of the reason for the rapid increase of Asian Americans in graduate education is that their numbers are beginning to increase in the Texas general population. But normally it would take several generations before graduate enrollments would start to go up. Asian Americans *do* play "leap-frog" in higher education. Faculty positions represent the same general patterns:

FULL-TIME FACULTY BY INSTITUTIONAL TYPE: 1977–1984

	BLACK	HISPANIC	ASIAN
PUBLIC 4-YR, 1977	674	391	334
PUBLIC 4-YR, 1984	648	495	731
PUBLIC 2-YR, 1977	278	400	29
PUBLIC 2-YR, 1984	370	561	51
PRIVATE 4-YR, 1977	180	105	130
PRIVATE 4-YR, 1983*	136	124	141

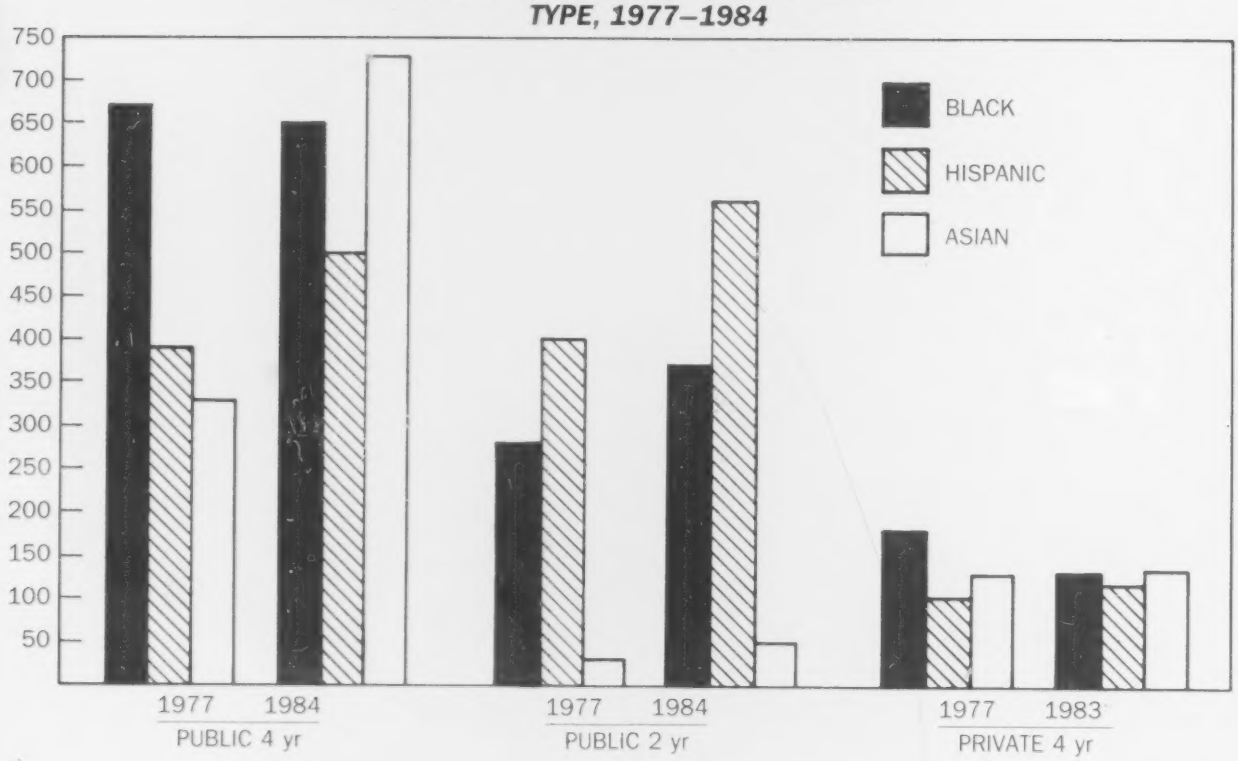
*1984 data not available. See Graph on Page 10.

Asians "level up" even in terms of faculty positions! They are spectacularly overrepresented in 4 year institutions—in 1984 there were more Texas faculty at public 4 year institutions who were Asian Americans than who were black or Hispanic, even though Asians are only 2% of the state's population. The same is true for the private institutions, although the numbers are smaller and the growth rate is slower. *Faculty in Texas higher education will continue to become even more white and Asian.*

The need to recruit more minority students for Texas higher education is becoming clear, yet in the latest American Council on Education's "Box Score" on states' special efforts to recruit minorities to higher education, Texas is listed twice for "programs recommended" and nothing else, while California is listed in 27 categories, most of which are programs already operational. Although Texas public institutions of higher education were preoccupied in 1986 with absorbing a 10% cut in funding, many approaches to this problem (like cooperative relationships with high schools) cost virtually nothing.

Maximum development of the state's *human* resources could bring the greatest return on the state's massive investment in higher education. It must be observed that the state has clearly *bought* its way to excellence in its higher education system, while the public school system which feeds it is not seen as an area which spending can improve. Soon the state will have to look systematically at its *entire* "educational investment portfolio," from preschool to graduate school, to see where strategic investments could be most profitably and equitably made.

FULL-TIME FACULTY BY INSTITUTIONAL TYPE, 1977–1984



GENERAL CONCLUSIONS

It is clear that Texas is a state with enormous potential and enormous problems. The economy has much potential for future development and diversification, not just in oil, cattle and "high tech," but most important, in the high end of the service economy (financial services, professional services, etc.). The more diversified the economy, the greater the possibilities for security and stability. The state cannot diversify the job and business structure unless there is an educational system prepared to develop the state's *human* resources to their fullest.

The Texas population will be over 40% minority by the end of the century, and schools will be over 50%. There is a good base in the state for the further development of middle class minority populations in the future. If the 46% of Texas public school children who are minority fail in the educational system, go on welfare at 18 and remain there until 65, *no Anglo Texan can retire*. Because of demographic trends, the various ethnic groups in Texas are now running on the same tether—if minorities succeed in Texas, Anglos will benefit.

As many Texans realize, the educational system (*all* of it) is crucial for the state's development. Here are some specific recommendations that may be useful in this process:

1. A large number of youngsters in Texas are "at risk" before they even *begin* public school—poverty, lack of English speaking ability, physical and emotional handicaps, and parents with a low level of education are four. Given this fact, the state needs to look carefully at equalizing opportunity at a very early age—a statewide Head Start-type program would bring a highly favorable return on the investment. If there is one thing we have learned about education, it is that *it is easier and cheaper to start kids out successfully in the educational system and keep them at grade level than it is to catch up with remedial programs for tenth graders*. Early childhood programs are not cheap, but there is a vast economic cost to *not* having the programs also.

2. Next to pre-school, the greatest need is to increase the percentage of youth who are successful through the high school diploma. The state has some advantages in this regard. Unlike California, which now has the largest class sizes in the nation, Texas can "fine tune" the system it has. Recruitment of qualified minority teachers could become a goal for the whole educational system, including colleges and universities which recruit and train teachers. More needs to be discovered about the specific reasons for the high dropout rates in Texas.

3. The system of higher education needs to be considered as a system with several *equally excellent components*. Austin is indeed a marvelous institution in terms of its ability to gather human and financial resources. But how good is the teaching there? The question needs to be at least addressed. The Permian Basin Campus should have the capability of striving for its own kind of excellence, as should Del Mar College in Corpus Christi. At the moment, the system seems to have "levelled up," in that excellence is perceived as being the *unique* characteristic of the two institutions at the top. The future of the state is heavily in the hands of all sectors of higher education.

4. All through Texas education, local leadership has been frustrated by the continuing attempt to run things from the top of the state's political structure. Local school boards are unable to lead. Local school principals cannot develop new curricula that are geared to the specific needs of their students. (It's a very diverse state with very different educational needs in various regions.) Presidents of colleges and universities are part of an overly precise pecking order centering on Austin. Faculty are seldom rewarded for improved teaching. The independent colleges and universities, which form a band of excellence almost equal to the publics, are not included at the table for many discussions. All of these components need to sense that they are important in the scheme of things, that they are to a large degree in charge of their affairs.

5. There is a real need in Texas for some consideration of the "separate but equal" structures within which educational decisions are made. At the moment there are two "supercommittees," one for public schools and one for higher education. There is virtually no linkage of these two structures, nor of the decisions which occur within them. Yet the truth of the relationship is obvious—*Texas higher education can be no better than Texas public schools*. They run on the same tether.

6. As Anglo migration into the state slows, Texas youth become a minority majority. Special attention needs to be paid to a state program that will *create* winners, not just *pick* them. (Texas education seems designed to select achievers rather than to create them.) The difference is a major one. Texas in the future will have no "throw-away" youth who can be disposed of without concern. EVERY young person will have to fulfill his potential if the state is to fulfill its destiny.

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TEXAS—SUMMARY OF MAJOR POINTS

1. Stereotypes aside, Texas is a *very* urban state—79.6 percent of its 14 million people live in the state's 26 metro areas—the largest number of metros of any state. It is not a state of wanderers—70 percent of its people were *born* in Texas.
2. Texas is, for the next decade, the most unpredictable state in the nation. This is due largely to the state's $3.6 billion shortfall, now partially and temporarily resolved by the activity of fall, 1986. (No *permanent* solution has been developed—the idea of paying taxes to pay for services is not a popular idea in Texas.)
3. The Texas economy has more potential for diversification than is normally supposed. The dominance of oil, cattle and "high tech," which caused so much of the pain in the first half of the 80's, could form *one* base of a diversified economy which also had very strong "high-end" services—financial, personal, electronic, professional and a variety of new business starts in service areas. These are areas with high salaries, good educational levels and economic and job stability.
4. Dallas and Houston are remarkable in that they have grown in their suburban fringes without destroying the core city. Given the decline in core cities in most of our major urban areas, this is a very optimistic comment on urban growth in Texas.
5. The state has a very high crime rate—2nd in murders per 100,000 people, with 3 cities in the top 25. Venereal disease is a major Texas problem, and the state ranks 3rd in syphilis, right behind Louisiana and Georgia.
6. The state's overall population is 35% minority, while public school populations are 46% minority. The future of the state is that of a "minority majority," but it will happen after California.
7. Texas ranks 42nd in terms of retention to high school graduation—only 69% of its youth graduate from high school, which means that about one third of its youth face adult life without a high school diploma.
8. The current Texas school reform activity is as "top down" as can be found in the U.S. The costs of operating the system now enacted into law will be severe, and the retention rate to high school graduation will likely decrease. Texas seems to feel that money will buy excellence in higher education (Austin), but that view is not applied to excellence in schools.
9. Higher education in Texas puts great emphasis on the "flagship" institution. The state's higher education programs do not reflect the current diversity in the state's population, particularly in terms of transfers and in percentage of students who graduate.
10. The state needs to begin looking at how the various levels of the educational system interact. The ultimate objective needs to be a system which will maximize the human potential of *all* the citizens of Texas.

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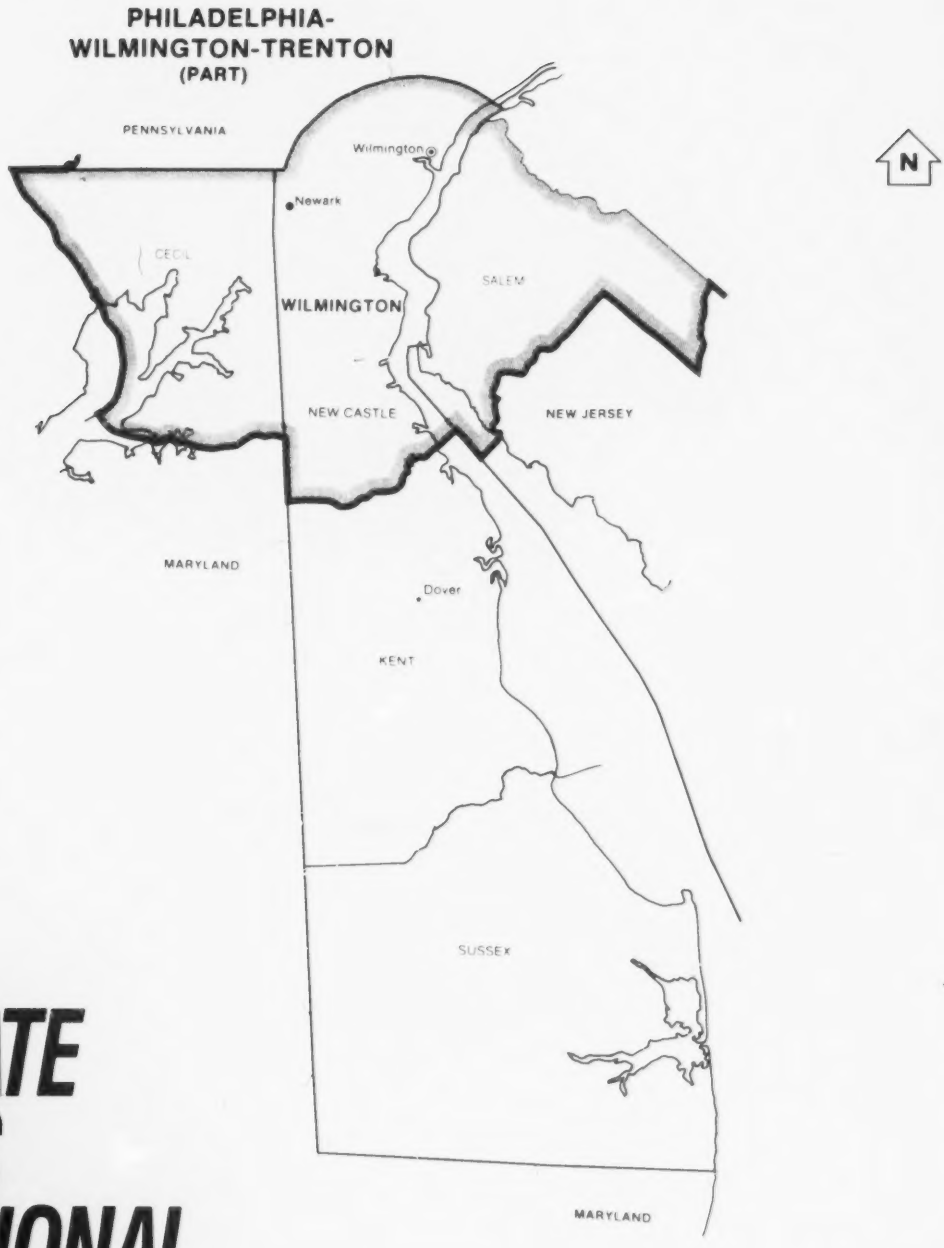

THE STATE AND ITS EDUCATIONAL SYSTEM

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ACKNOWLEDGEMENTS

Special thanks need to be given to William B. Keene, State Superintendent, and to members of his staff for their excellent publications describing their state's educational system. Although it may be easier in a smaller state, it is an unusual pleasure to look at two different publications and find that their numbers describing the same thing add up to the same total! In addition, the data available in Delaware are much more timely than in other states.

This report brings together a wide variety of data having to do with Delaware. This integration could not have been accomplished without a computer program called Super-File, which has been a joy to use. Congratulations to FYI, Inc, and the geniuses who thought it up.

Thanks also to Michael Usdan, President of the Institute for Educational Leadership, and to Bob Atwell, President of the American Council on Education, for their advice and support. Louise Clarke, Chief Administrative Officer at IEL, has become indispensable in producing these reports, on time and on budget, while Tony Browder has become crucial for graphics and design. Finally, Frank Dilley, Chairman of the Philosophy Department at the University of Delaware and a long-time friend, was very helpful in providing Delawariana.

Errors of fact and interpretation, however, remain the responsibility of the author.

Harold L. Hodgkinson
American Council on Education
Washington, D.C.
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COVER NOTE:

This map of Delaware will surprise many people who have not seen the state's outlines before. In addition, the Wilmington-Philadelphia-Trenton Consolidated Metro Area swells the northern part of the state well past its boundaries. Sixty-seven percent of the people of the state live in 1/4th of the land mass. In thinking about the state's future, these areas are the social equivalents of mountains, rivers and roads. "People Maps" like this one are becoming increasingly important tools for politicians, marketers of products and services, and even educators!

DELAWARE:
THE STATE AND ITS EDUCATIONAL SYSTEM

HAROLD L. HODGKINSON
Senior Fellow, ACE

DELAWARE: THE STATE AND ITS EDUCATIONAL SYSTEM

Most people are amazed when they see a map of Delaware for the first time, as Delaware is one of about five states whose outline cannot be made out from most national maps. (Even our cover map, which indicates the Wilmington Consolidated Metro Area, distorts the state's true dimensions by extending past the state's boundaries to show the Metro.) It is possible to ignore Delaware, even easier to underestimate it. Unlike its neighbor, New Jersey, which has crammed a very large number of people into a very small number of square miles (New Jersey and Japan have approximately the same density—1,000 persons per square mile), Delaware remains a small state in size and population. Although it is a southern state in many ways, it shares many characteristics of northern states (e.g., its growth rate during the 1970's was considerably slower than for the South as a whole).

Delaware's history suggests a state whose importance was much greater in the early years of our Republic, yet which remains a vital part of the nation. For example, Delaware was the first state to sign *both* the Constitution and the Bill of Rights, a fact almost unknown in this year of Constitutional celebration. In our time, more Fortune 500 companies are incorporated in Delaware than in any other state. Delaware has also become a (if not *the*) major center for bank credit cards and their processing. Behind both of these trends lies some very "progressive" banking legislation that allows banks a large amount of latitude in the making of money. In addition, Delaware relies on the only Court of Chancery, directly descended from the English judicial system, and favorable to the corporate side of many disputes, just as Louisiana makes use of aspects of the French legal system.

Delaware remains one of the best kept secrets around. Quality of life remains very high there on a number of indicators—beaches, quick movement throughout the state, relatively cheap housing for the East, relatively low crime rates, etc. Low population increases projected for the rest of the eighties indicate that Delaware will remain as it is today. Let's take a look at the state in terms of its basic demography.

DELAWARE'S PROFILE

1980 POPULATION	47th	594,338	1970: 548,104 1990: 629,900 (projected)
BLACK POPULATION	30th	95,845	
PERCENT BLACK	10th	16.1%	
HISPANIC POPULATION	44th	9,661	
PERCENT HISPANIC	26th	1.6%	
ASIAN POPULATION	n.a.	4,112	
FOREIGN BORN	26th	3.2%	
BORN IN ANOTHER STATE	13th	48%	
POPULATION OVER AGE 65	35th	10%	
POPULATION UNDER AGE 18	34th	28%	
AVERAGE AGE	26th	29.7 Years	
WOMEN IN WORKFORCE	19th	51.4%	
COLLEGE GRADUATES	17th	17.5%	
HIGH SCHOOL GRADUATES	27th	67.8%	
HOUSEHOLD INCOME	13th	$17,846	1987: $27,494 (12th)
HOUSING VALUE	25th	$50,200	

From this little portrait, we can see a state whose future is very much the present. Although the *number* of blacks is relatively small, the state is so small that the *percentage* shifts upward strikingly. Because the black percentage among youth is considerably higher than for the state as a whole (18 percent of adults are minority, and 30 percent of children), the future of Delaware will contain more minority citizens—black, Hispanic and Asian Americans. The state has fewer older and younger citizens, meaning that a large number of workers (age 30) will be moving into their peak earning years during the next decade. With a small percentage over age 65, a higher share of resources can be used to educate the young, and because of the small percentage of youth, the state can spend more per young person. However, the fastest growing segment of Delaware's population is persons over 85, and all indications are that the state's population will age rather rapidly during the next decade. In addition, Delaware's population of very young children (0-4 years) will show a slight increase until 1990, resulting in a small increase in school-age children early in the next decade.

Because many women are in the workforce (and because it is very difficult for a family to live a middle-class life on one income today) and because of the high percentage of college graduates, household income in Delaware is high, while housing costs are comparatively low, allowing a higher level of discretionary income, one of the major indicators of quality of life. However, this educational level and income level should produce a very high rate of retention to high school graduation, which is not the case. We will pursue that puzzle in a couple of pages.

It is interesting to observe more transience in the population than expected, in terms of people who were born in another state. In addition, migration reveals another factor that is increasing the minority proportion of Delaware's citizens, as can be seen below:

MIGRATION IN DELAWARE 1975-1980

	All	White	Black	Hispanic
In	81,174	67,603	10,180	3,094
Out	83,060	73,532	7,813	1,518
Net	-1,886	-5,929	2,367	1,576

During this period, the state lost 5,929 white citizens and gained 3,943 minority ones. If one adds higher minority fertility rates, it is clear that minority populations will gradually rise in Delaware, given that in 1985, 30 percent of Delaware youth were non-Anglo.

An important dimension of Delaware concerns the complexity of its only Consolidated Metropolitan Area, which is referred to by the Census Bureau as *Philadelphia-Wilmington-Trenton*. This metro area had 523,000 residents in 1980, almost the size of the entire Delaware population, and is an integral part of the "BosWash" corridor, the most densely populated section of the country. Within this corridor, the Wilmington metro lost some population in the city limits, but expanded its suburbs almost enough to cover the losses. However, *jobs* appear to be leaving Wilmington for the suburbs as well, which suggests some major difficulties for Wilmington in maintaining the stock of middle-class jobs and housing it now possesses.

A look at the job and industry picture for Delaware should be interesting in this regard. The first column indicates the percentage of Delaware workers who work in that area, the second indicates the relative contribution of that area to the Delaware economy, based on a national index of 100:

DELAWARE JOBS AND INDUSTRY, 1980

	PERCENT	INDEX
AGRICULTURE, FORESTS, MINING, FISHING	2.6%	65
CONSTRUCTION	6.5	110
MANUFACTURING	23.6	105
TRANSPORT, COMMUNICATION	6.5	89
RETAIL, WHOLESALE TRADE	21.8	107
FINANCE, INSURANCE, REAL ESTATE	5.1	85
BUSINESS, REPAIR, PERSONAL SERVICE	7.4	88
PROFESSIONAL SERVICE	20.9	103
PUBLIC ADMINISTRATION	5.5	104

This is a nicely diversified economy, particularly for a small state. Dependency on agriculture and mining is low, which is a favorable position these days. The construction figure is encouraging in terms of future economic growth (construction indicators generally go up before economic development occurs). Manufacturing is above the national average, but not by much, and most of Delaware manufacturing will not need the massive lay-offs and retraining characteristic of Michigan, Indiana and Ohio. (Delaware is, after all, home base for Dupont and a large number of other technically oriented firms, which helps to explain the excellent quality of the engineering department at the University of Delaware, as well as the unusually large number of engineers in the Delaware workforce—Delaware is to engineers what New York State is to lawyers.)

Retail and wholesale trade is excellent, as are professional and government services. The only surprise is in the "high end" of the service economy—financial services. Perhaps because of the proximity to New York, Philadelphia and other financial service giants, Delaware businesses have preferred to use these services rather than "grow their own." However,

with this one exception, the state's economy and workforce appear to be well balanced. Although not "recession-proof," there is clearly enough diversity in the Delaware economy to ride out most major economic storms. One problem Delaware will face in the future is the increasing share of new jobs which come from the low end of the service economy. The number of Delaware workers in specific jobs may make the point clear:

JOBS IN DELAWARE
(Total workforce 262,800)

Architects	200
Engineers	5,000
Doctors	1,100
Dentists	200
Lawyers	1,200
Computer Programmers	1,000
Secretaries	12,700
Fast food	12,700
Janitors	7,300
Assemblers	4,000

Although Delaware is high in engineering-related industries, it is clear that the low end of the service economy is moving ahead. (For this reason, 3.5 million people worked full time in the U.S. last year, yet were eligible for poverty programs.) Delaware, which has a good record in small business starts, needs to continue that effort, particularly in the businesses that will bring middle-income *service* jobs to the state. At the moment, for every computer programmer trained by Delaware's educational system, about 12 fast food workers and 7 janitors will also enter the workforce. It is not at all clear what sort of education *they* should receive—education debates center around computer programmers and not on cashiers, although nationally, for every *new* job created for a computer programmer there are 18 jobs created for cashiers. The major danger is that, as with the nation as a whole, the middle class will decline with more people moving into both the rich and poor columns. *Most* jobs must be middle-income jobs if we are to sustain a middle-class society.

There are a couple of items from the statistical grab-bag that may be worthy of attention. First, the state has

DELAWARE CRIME RATE
PER 100,000

MURDER	28th	6.9
RAPE	34th	24
ROBBERY	23rd	137
PRISONERS	8th	201*

*1981 Data

rather low rates of major crime—28th in murders (6.9 per 100,000 population), 34th in rapes (24 per 100,000) and 23rd in robberies (137 per 100,000). Yet Delaware is *8th* in prisoners (201 per 100,000 in 1981). Some interesting questions can be raised in terms of state priorities and procedures. This does not seem to be an aberration due to small state size, in that North Carolina, which leads the nation in prisoners per 100,000 population, ranks even lower than Delaware on most serious crime indicators! Apparently, some states just work harder on prisoners. Similarly, Delaware ranks 8th in the percentage of drivers that exceed the 55 MPH speed limit, yet ranks 16th in traffic fatalities per million miles driven, suggesting that even though most drivers break the speed limits, the roads are good enough (and straight enough!) to keep most people from getting killed.

Some social indicators are of interest—Delaware is 18th in divorces: 523 per 1,000 marriages. Abortion rates are higher than expected—the state ranks 12th with 399 abortions per 1,000 live births (still much lower than New York's *666* abortions per 1,000 births), and, even more interesting, Delaware ranks *2nd* in babies born out of wedlock. Twenty-three of every 100 babies born in Delaware today are born to unmarried parents. Only Mississippi has a higher rate. Why, in a state with high levels of income and education, is the illegitimacy rate so high? True, the rate is higher for blacks than whites, but not enough to explain the number two ranking for Delaware. It is important to realize that of the children who will enter elementary school in Delaware in the next five years, almost one-fourth of them will belong to unmarried parents. If you add to this the kids whose parents will divorce while they are under 18, you have well above half of the children coming to school in Delaware whose family background used to be called "unconventional." At this point we might look at some of the data on Delaware schools:

DELAWARE PUBLIC SCHOOLS: BASIC DATA

	1970	1982	1985-86
TOTAL ENROLLMENT	133,000	93,000	92,901
K-8	94,000	60,000	48,814
9-12	39,000	33,000	30,000
PUPIL-TEACHER RATIO	*	17.8:1	16.5:1
TEACHER SALARY	$12,009	*	$24,625
PER PUPIL EXPENDITURE	$ 1,383	*	$ 4,517
CHILDREN IN POVERTY	*	*	14.6%
PERCENT HANDICAPPED		16.4%	
PERCENT GIFTED		4.4%	
MINORITY:			30.72%
ASIAN			1.24%
AMERICAN INDIAN			.13%
HISPANIC			2.3%
BLACK			27.05%
BILINGUAL		1.0%	*

FUNDING PERCENTAGES FOR EDUCATION	1973-74	1985-86
FEDERAL	8.0%	7.7%
STATE	69.0%	68.7%
LOCAL	22.9%	23.5%

*Data Not Available

These numbers do not fully explain the decline in students from 1970 to 1983. *1984* was the first year during this period in which enrollments increased, reflecting an increase in K-4 enrollments which will spread through the system by 1991. (Grade 9–12 enrollments continue to decline until 1990, when the whole system begins to show increases.) Nationally, however, the "Baby Boomlet" ran out of gas in 1986, with the lowest birth rates ever recorded in the history of the nation—even the *number* of births declined. Whether or not Delaware can expect a decline in fertility in the years to come is a crucial planning issue. White births have been more unstable over the years than minority fertility—the Baby Boom rate for whites was 2.9 children per female, the current rate is 1.7. The current Mexican-American fertility rate of 2.9 children is very stable, and is exactly at the level for whites during the Baby Boom period from 1946 to 1964. Today, 55 million women are producing fewer children than 33 million women did during the Baby Boom.

One notices immediately the improvement in teacher salaries and per pupil expenditure, but compared to national norms, Delaware has moved from slightly above average on teacher salaries to slightly below the national norm ($25,257 for 1985-86) while still being above average on per pupil expenditure ($3,677 nationally in 1985-86).

Although several (excellent) publications from the State Department of Public Instruction mention the difficulty of doing state comparisons on retention to high school graduation (many youth move into and out of the state during a four-year period, making sophomore-senior comparisons questionable, etc.), it is necessarily one of the most widely used indicators of educational performance—like the SAT, because it is a simple and politically useful indicator, we must take it seriously. The official figures from the U.S. Department of Education show 8,076 ninth graders in Delaware in 1980, and 6,410 high school graduates in 1984, suggesting that 79.4 percent of the 1980 group graduated on time (this figure omits Special Education students). This is above the national norm of 74.1 percent by a considerable amount, ranking Delaware about 17th in the U.S. Department of Education data. Another way to think about it is to say that of the 44,087 students enrolled in grades 7-12 in 1985-86, 2,409, or 5.5 percent, dropped out. Four years of this rate gives you a total of 22 percent dropouts, or 78 percent graduates, quite close to the nationally derived figure for Delaware.

It would appear that Delaware retains its black students more effectively than the nation as a whole, in that blacks make up 27 percent of the public school enrollment but only 29 percent of the state's dropouts. In addition, blacks

constitute 22 percent of the regular high school diplomas issued during 1985-86. One would normally expect a lower figure for black graduation, indicating that the state is doing something right in this area. (The relatively small size of the state, and of most schools and classes, may be a contributing factor to the success rate among black students. In addition, there is a significant black middle class in Delaware which contributes to good academic achievement.)

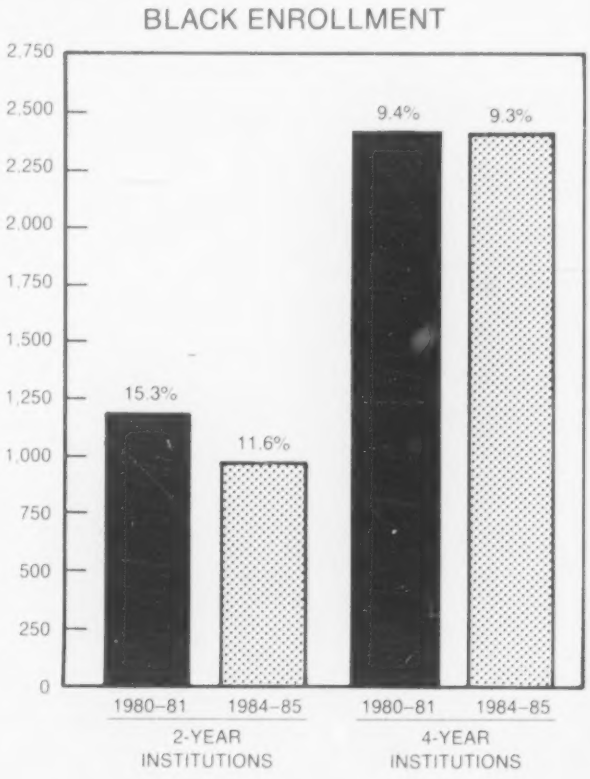
Although such retention data are not precise, the recording difficulties are common among states, indicating that, like the EPA mileage ratings of automobiles, the mileage is not what the individual driver gets, but the *ranking* of brands is quite accurate. Comparisons of retention rates across state educational systems are about the same.

Delaware is one of the few states in which high quality data are kept on the state's independent schools as well. During 1985-86, there were 22,479 students enrolled in Delaware's 121 independent schools, which represents 24 percent of the public school total, twice the national average for independent school enrollments. 18,615 were enrolled in Catholic and other religiously related schools, with 3,864 enrolled in non-affiliated schools. 9.8 percent of Delaware non-public school students are minority, about 1/3rd of the public school proportion.

Looking at the public schools for the state as a whole, it is clear that Delaware is not a "crisis" state at the present time. There are problems, to be sure, but the state did not take a beating during the 1982 recession, and adjustments to the economy and workforce will be gradual and small in scale. Its governors have been education-conscious in recent years, but not with the zeal of the Southeast governors. Partly this is because Delaware's educational system has never been *truly* behind the nation, and the urgent game of "catch-up" has not had to be played, at least not with the urgency of many other states.

DELAWARE HIGHER EDUCATION

Although there are only eight institutions of higher education in Delaware in 1985-86, five public and three independent institutions enrolling a total of 31,883 students, that does not mean that there are no coordination problems! In the first place, 3,348 high school graduates in 1981 chose to go out of the state to attend college somewhere else, about 29 percent of the potential freshmen in the state. (Other small Eastern states—Connecticut, Rhode Island, New Jersey and New Hampshire—also have high outmigration rates of college students. One of the latent functions of attending college is to get away from home, and if home is a hour's drive, you haven't truly "gotten away!") In addition, one must consider the appeal of Delaware for out-of-state students who come into the state to study—Massachusetts, North Carolina and Texas were the big winners using that index. For Delaware's 3,348 residents who left the state to study, 3,658 students entered Delaware to study in 1981, giving the state a tiny "net gain" in that department. Both the University of Delaware and Delaware State, its black counterpart, attract many out-of-state students. From 1970-1981, Delaware's first-time college enrollment dropped by 17 percent; from 1981-1984 the state held even, although public institutions dropped 5 percent while independents gained 49 percent. In 1982, 13 percent of Delaware's total enrollment was minority, while 29 percent of Delaware's public school students were. Actually, 13 percent minority enrollment in higher education is a little below the U.S. average of 17.4 percent in 1984, suggesting an area in which the state could work harder. Black enrollments in the state look like this:



Hispanics were only 96 and 94 enrollments in two-year institutions and 146 and 212 in four-year institutions during the intervals discussed above. Asian enrollments in two-year institutions were 73 in 1980-81 and 88 in 1984-85 and in four-year programs, 126 in 1980-81 and 279 in 1984-85. At the graduate level, the only increase was blacks in graduate school, up from 52 to 109.

In 1984, 27,422 students were enrolled in public institutions in Delaware, while 6,072 (18 percent of all students in the state) were in independent institutions. Although 18 percent doesn't sound like much, the *numbers* of students tell a different story—independent enrollments in Delaware actually jumped from 2,392 in 1967 to 6,072 in 1984. The sector seems to be viable in Delaware higher

education, even when enrolling less than 20 percent of the state's students.

The state is higher than average in terms of tax *capacity*, but in terms of "level of effort," the state only rates 87 with a national average of 100. This indicates clearly that there are unused revenues in the state for future needs, including public schools and higher education! (Additional support for this notion is that most referenda in the state for additional public school funding passed in the last decade.)

Although the numbers in higher education in Delaware are small, the proportions indicate that the state is rather well served by its higher education system, both in terms of physical access to a campus and in terms of the range of campus programs and types. To have both a "flagship" like the University of Delaware as well as a traditionally black institution, Delaware State, is unusual diversity for a small state. (Indeed, one of the problems in the state is the need for greater articulation and collaboration between these two institutions, as well as with Delaware public schools.)

GENERAL CONCLUSIONS

Delaware is a good example of the falsity of the old notion that small is simple. Although a small state in terms of population, its social systems and bureaucracies can be complex indeed. One indicator of this is the fact that the Mason-Dixon Line parallels the state's western border, making Delaware the only state *east* of the line. Like the South, Delaware's black population is larger than the national average as a percent of the state's total. Like the North, Delaware did not share in the population growth characteristic of southern states during the last decade.

Delaware has been unusually popular with American businesses, leading to more Fortune 500 companies being incorporated there than in any other state. This characteristic will be very helpful in Delaware's future, as will the high level of household income, well above the national average. Its manufacturing capacity will not need the retraining and job creation efforts that have characterized Michigan, Indiana, and Ohio. However, the need for engineers will increase slightly in the future, but not as steeply as the need for service workers, particularly for those jobs that pay $5.00 an hour or less.

Delaware's youth population has proportionately more blacks than the state as a whole, suggesting a gradual increase in the proportion of the state's adult population who are non-white. In addition, Delaware has an unusually high number of independent schools. The higher education system in the state is diverse, with both a "flagship" university and a traditionally black university, as well as some private institutions and community colleges.

Here are some recommendations regarding the future of the state and its educational system:

1. With an increasing percentage of the state's population over 65, and an increasing group of young children, there will be increased demand for resources for the young and old. These resources will be generated by a large workforce in their thirties, moving into their peak earning years. A smaller generation will be entering the workforce until about 1995, and this group will provide a disproportionate share of the generational transfer payments needed to provide services to both the young and the old. If one looks at the increase in younger children in the Delaware school system, it is increasingly minority, although the increase is relatively slight. As a result, an aging and heavily white workforce will find itself dependent upon a workforce increasingly female and minority in composition. It is vital that both women and minorities have access to jobs with economic potential if this cycle is to operate in each generation's best interests in Delaware.
2. Coordination between educational levels in Delaware should be excellent; however, even in a small state the contacts between those in public schools and higher education are hard to develop. There is a need to develop a collegial relationship among those who lead the various educational systems, including those in Delaware business engaged in education and training programs. Independent schools and colleges also bring important gifts to the party. At the moment, community colleges play a major role in many of these relationships, but more people need to be involved. In addition, Delaware State University needs to be seen as a major resource in the development and enhancement of Delaware's black middle class, particularly in engineering and the professions.
3. The percentage of children in poverty in Delaware is too high for a small, fairly wealthy state. As the teenage population declines into the 1990's, it becomes more important that *every* Delaware youth succeed—there will be no surplus kids to throw away. Here is an area in which the entire state's future interests can be served, by meeting the extra needs of Delaware youth who are at risk of school failure.

DELAWARE—SUMMARY OF MAJOR POINTS

1. Delaware is a small, but complex, state. It has attributes of both northern and southern cultures—above average on manufacturing and on the percentage of blacks in the population. (It ranks 10th in the percentage of blacks in the population.)
2. Its businesses have always required a high number of professionals (especially engineers), but increasingly will have job openings in the low end of the service economy. This may change the current situation of above average household income levels in Delaware.
3. Sixty-seven percent of Delaware's citizens live in the Wilmington Metropolitan Area. Although Wilmington's suburbs have grown and the core city has declined, the decline has been less than other eastern metros. The issue in the future will be *jobs* moving to Wilmington's suburbs, a development which is now beginning, and which represents a major threat to the core city in the future.
4. The Delaware economy shows a healthy balance between the sectors, with diversification a major factor in the state's relative economic stability. A rather high percentage of women are in the workforce, contributing to a high level of household income. In the future, daycare will become a major issue, given the current increases in birth rate in the state.
5. Delaware is 18th in divorces, 12th in abortions and 2nd in out of wedlock births. Although the state tends to be economically conservative, a majority of children will come from "nontraditional" homes.
6. The state's three counties enroll about even percentages of black children. The 121 independent schools in Delaware enroll about 24 percent of the public school total, about twice the national average. Public schools in Delaware seem to graduate a higher percentage of black students than in the nation as a whole. However, given the state's many advantages, the retention rate to high school graduation for all children could be improved.
7. Higher education in Delaware is very diverse for a small state, including public and private institutions, community colleges, a traditionally black institution and a "flagship" state university. Although 3,348 high school graduates leave the state to go to college elsewhere, 3,658 students come into Delaware from other states in order to pursue a college degree, making Delaware a slightly "net gain" state in terms of student migration.
8. The state is above average in tax *capacity* and below average in taxes *raised*, giving the state a low rating on level of effort in its tax base. In the public schools, a majority of funding has come from state sources since the 1970's, unlike many states that suddenly find themselves in a situation of increased state funding, with consequent declines of autonomy on the part of local school boards. The State Board of Education has been powerful in Delaware for some time.
9. There is a need for increased voluntary coordination between the public and independent schools, institutions of higher education and those representing business education and training programs. In a small state, these activities should be successful, and could serve as a model for larger and more complex states as we in America go about the business of re-defining collaboration.

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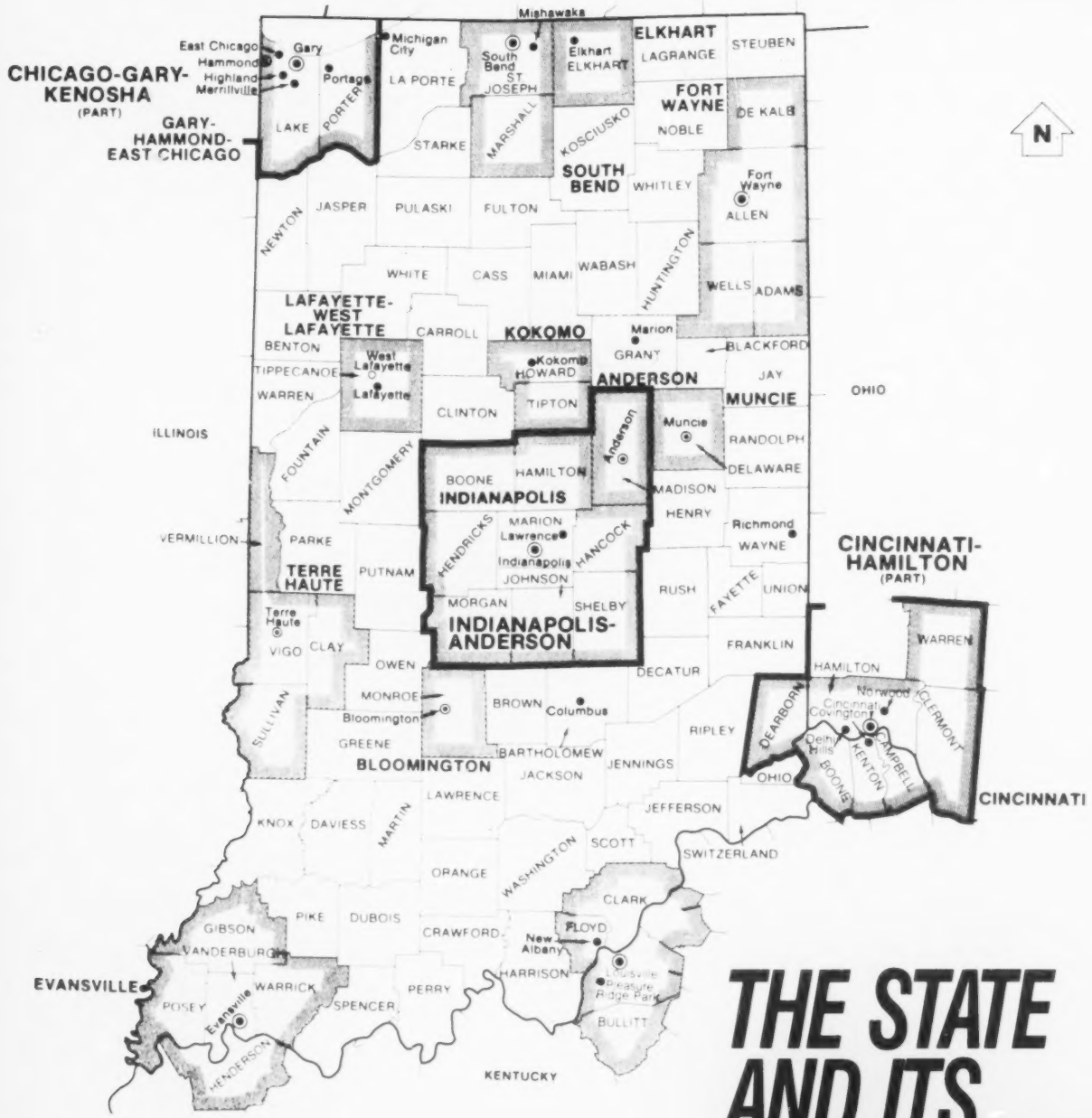

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Cover Note:

This map of Indiana, based on metro areas, reveals Indiana as very urban. Also, many Indiana metros are shared with other states—Illinois, Ohio and Kentucky. The complexity of the state can be seen in the variety of regional values found in Indiana's urban areas. In thinking about the state's future, these areas are the social equivalents of mountains, rivers and roads. "People Maps" like this one are becoming increasingly important tools for politicians, marketers of products and services, and even educators!

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INDIANA: THE STATE AND ITS EDUCATIONAL SYSTEM

Indiana is both a Great Lakes state (manufacturing, urban) and a Great Plains state (rural, traditional values, agrarian). In the *Nine Nations of North America*, Indiana is a mixture of "Western Foundry," "Heartland," and "Dixie" influences. This unusual melange of cultures is also seen in the following items from Indiana:

- The Empire State Building is made of stone quarried in Indiana.
- The Indiana Dunes are a *real* desert in the Midwest.
- The state lives on basketball, as a very small town can field a team which can win the state championship.
- Both the American Legion and the Ku Klux Klan started in Indiana.
- *Middletown*, the classic study of "typical America," was done in Muncie, Indiana.
- A world class opera conservatory is located at Indiana University, also the location of Kinsey's studies of sexual behavior.
- Indianapolis was the center of auto manufacturing long before Detroit became Motown, producing the Cole and other major cars. The Indianapolis 500 is located in the *historically* correct city.
- The transition from motor capital to Detroit subcontractor is a major piece of the state's history.

Because so many complex values and histories impinge on the state, we need to get a clear look at the state as it actually is. As the cover of this publication suggests, there are 13 metro areas in Indiana, and 70% of the people live in them. On the other hand, much of Indiana is very sparsely populated and is concerned with agricultural activity. The two systems merge in some ways—Indianapolis, a major city, has one of the lowest police to citizen ratios in the nation. Only 13.9 police are needed for every 10,000 citizens, compared to 41.7 in Chicago and 44.4 in Philadelphia. Apparently, "Heartland" values work in cities as well as on the farm.

The manufacturing areas of Gary-Hammond-East Chicago, South Bend, Kokomo and Cincinnati-Hamilton have had a difficult time during the last decade, as much of the manufacturing in Indiana and Ohio has been subcontract work for Detroit. The economic bounceback in both Indiana and Ohio has been slow but steady, as workers retrain for service jobs that usually pay less than the manufacturing jobs they left. In both states, unemployment rates can go down at the same time that household income declines, if the new workers are making very low wages.

With this in mind, let's look at some of the state's population characteristics:

INDIANA PROFILE

1980 POPULATION	12th	5,490,224
1986 POPULATION	*	5,537,804
BLACK POPULATION	20th	414,785
PERCENT BLACK		7.6%
HISPANIC POPULATION	17th	87,047
PERCENT HISPANIC		1.6%
ASIAN POPULATION	*	19,000
PERCENT ASIAN		.4%
OVER 65	31st	10.7%
UNDER 18	16th	29.5%
MEDIAN AGE	31st	29.2 Years
WOMEN IN LABOR FORCE	26th	50.3%
COLLEGE GRADUATES	45th	12.5%
MARRIED COUPLE HOUSEHOLDS	9th	64%
MEDIAN HOUSEHOLD INCOME	18th	$17,502
OWNER-OCCUPIED HOUSING	5th	71.7%
HOUSING VALUE	39th	$37,200
BORN IN ANOTHER STATE	*	28.7%

From this we can see a different view of Indiana, one that belies the "small town" stereotype. Although ethnic diversity is lower than for the nation as a whole, greater diversity is in the offing—10% of the state's population is non-Anglo, while 23% of the public school children are, and over 50% in Indianapolis schools. Because relatively few people move in and out of Indiana, today's school children *are* tomorrow's Indiana adults.

The traditional notions of living in a home that you own, and sharing it with someone you are married to (an idea that is perceived as quaint in some parts of the country) seems to be alive and well in Indiana. Also traditional is the notion that women should not work outside the home, one of the reasons for the relatively low level of household income. (Two incomes are becoming a necessity for a middle-class family.)

Like Ohio, people without college degrees have been able to do quite well financially in the manufacturing industries. It is unlikely that they will continue at this level, as jobless growth becomes the watchword of manufacturing. New jobs in Indiana are heavily in the low end of the service economy, and as we have said, the state could actually reduce unemployment and have average family income *fall* at the same time. (In 1986, 3.5 million Americans worked full time, yet were below the federal poverty line. Some of these people had "junk jobs" in Indiana.) There is a major need in Indiana and Ohio which has not been met—*diversification into the high end of the service economy, not into "high tech" manufacturing*.

Partly in keeping with the traditional value structure and low diversity, Indiana has a relatively low crime rate. The table below gives crime rates per 100,000 citizens for 1980:

INDIANA CRIME RATE PER 100,000

	INDIANA	INDIANAPOLIS
MURDER	8.9	15.3
	22nd	19th
RAPE	33	58
	20th	19th
ROBBERY	141	313
	22nd	21st

Even Indianapolis ranks as a safe city, although crime rates are higher than for the state as a whole. The only crime with a high rate (going with the Indy 500) is *speeding*– the state ranks 12th, with 56% of drivers exceeding the 55 m.p.h. limit. Yet, on traffic *fatalities*, the state ranks 33rd! It seems that on the state's fine highway system one can exceed the limit and still not get killed. Also of interest is Indiana's low abortion rate—the state ranks 42nd in this category, with 168 abortions for every 1,000 births. (At the other extreme is New York, with 666 abortions for every 1,000 births. Little has been written about the *educational* implications of these differences.) Out of wedlock birth rates are comparatively higher—the state ranks 17th in this category. 14.6% of all children born in Indiana are born out of wedlock, a figure that contests the state's otherwise solid commitment to Heartland values. The percentage of children whose parents will divorce during their youth is not known, as Indiana is one of two states that did not report divorce rates in 1980.

If we look at population movement in Indiana, it is very small for a state of 5.5 million people:

INDIANA POPULATION MOVEMENT: 1975-1980

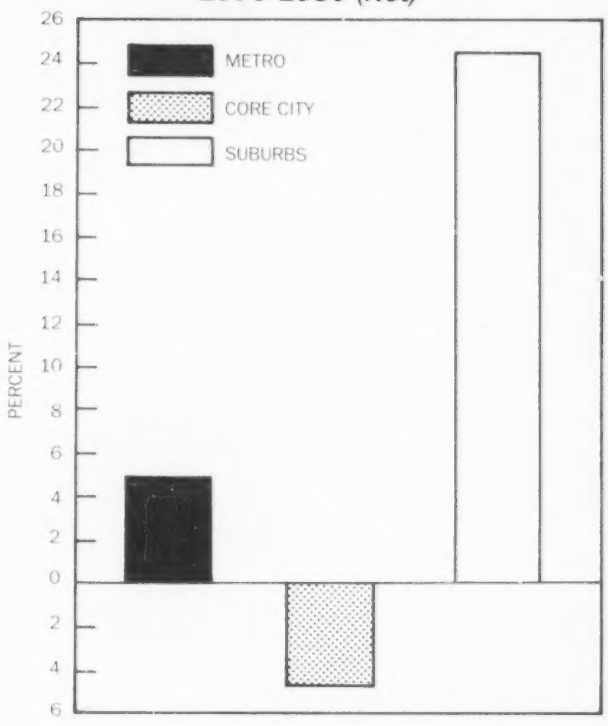
	ALL	WHITE	BLACK	HISPANIC
IN	415,859	370,696	28,118	11,545
OUT	467,014	429,761	28,224	8,988
NET	-51,155	-59,065	-126	+2,557

Although the rates are low, an important fact is that the white population "net" showed a decline, while Hispanics gained slightly. This is one reason for the increasing minority population, in addition to fertility declines among whites in Indiana. (It is interesting to note that white birth rates were 2.8 children per female at the height of the Baby Boom, while white rates *today* are 1.7 and dropping. Mexican-American fertility today is 2.8, the white birth rate during the 1950's. A handy index is that any group needs 2.1 children per female to stay even—two to replace mom and dad and .1 to cover infant mortality.) Nevertheless, the state is quite stable in population, with only 28.7% of its residents being born in another state. (Nevada, with *very* high crime rates, has 78% of its citizens who come from another state.) Looking at growth in Indianapolis will show us another trend:

INDIANAPOLIS METRO GROWTH: 1970-1980

	1980	1970	NET
METRO TOTAL:	1,666,575	1,111,352	+5%
CORE CITY:	700,807	736,856	-4.9%
SUBURBAN:	465,768	374,496	+24.4%

INDIANAPOLIS METRO GROWTH: 1970-1980 (Net)



The data show a trend among virtually all U.S. cities: **suburban growth has been purchased at a cost of economic decline in the core city.** The city could still manage a move to "bedroom" communities during the 1960's, as long as the suburbanites worked downtown. Today, however *both* jobs and homes are moving to the suburbs, leaving a depleted city economy behind. Much of what appears to be a decline in manufacturing jobs is a movement to suburban service jobs. With all the talk about revitalizing core cities as places to shop, it is a drop in the bucket compared to suburban shopping volume. With jobs, homes *and* shopping mainly in suburbs, there is little to work with in revitalizing downtowns. "Gentrification" makes good newspaper copy, but does not even begin to solve the urban problem.

Additionally, Indianapolis had 157,338 black residents in 1980, of whom 152,590 lived in the city limits, leaving a *suburban* black population of only 4,748 for a metro area of 1,666,575 people. Three percent of Indianapolis blacks live in suburban areas, compared to 69% of blacks in Miami. In Gary–Hammond, 126,361 blacks live in the metro area, but 107,539 live in the core city, leaving only 18,822 suburban blacks, or 6.7% of the black population. One can only conclude from this analysis that Indiana has not been particularly successful in developing a significant black middle-class population in terms of suburban residency.

However, when economic level is used instead of residency, the picture improves strikingly for Indiana blacks:

METROPOLITAN AREAS RANKED BY BLACK INCOME LEVELS:

1. Nassau-Suffolk, NY
2. Miami, FL
3. Columbia, SC
4. Richmond, VA
5. Newport News–Hampton, VA
6. Columbus, OH
7. Los Angeles–Long Beach, CA
8. Dayton, OH
9. San Diego, CA
10. Gary-Hammond, IN
11. Indianapolis, IN
12. Charleston, SC

There are two hypotheses for these very high Indiana ratings: (1) the small number of suburban blacks in Indiana are all millionaires; (2) it is possible in Indiana (as in Columbus, Ohio) to be black, live in the core city *and* live a middle-class life. "Middle" here is interpreted as household income between $30,000 and $50,000 a year in 1986 dollars. The second hypothesis is the preferred one, although the Joint Center for Political Studies pointed out in 1986 that 12% of working black males make *more* than $50,000 a year. Minority no longer *equals* poor.

One can argue that the future of Indiana will be bound up increasingly in the future of the Indiana black (and to a lesser degree, Hispanic) middle class. In order to explore this, let's look at the Indiana economy. The following chart shows the percentage of the Indiana work force in column 1, and the contribution that economic area makes to the Indiana economy, using 100 as an index for the U.S. average:

INDIANA WORKFORCE AND ECONOMY, 1980

	PERCENT OF WORKERS	INDEX
AGRICULTURE, FORESTS, MINING, FISHING	3.4%	85
CONSTRUCTION	5.0%	85
MANUFACTURING	30.9%	138
TRANSPORTATION, COMMUNICATION	6.6%	90
RETAIL, WHOLESALE TRADE	20.3%	100
FINANCE, INSURANCE, REAL ESTATE	5.0%	83
BUSINESS, REPAIR, PERSONAL SERVICE	6.4%	76
PROFESSIONAL SERVICE	18.8%	93
PUBLIC ADMINISTRATION	3.5%	66

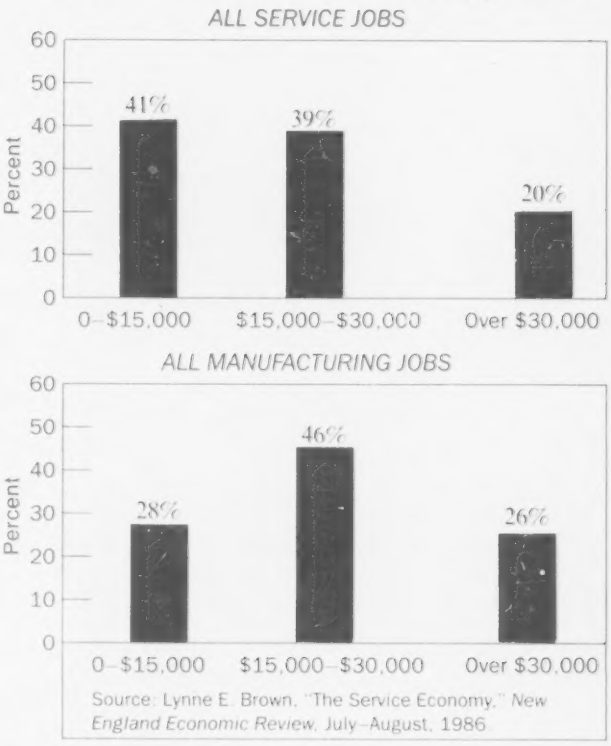
It is good for a state *not* to have too high an index on agriculture, mining, forests and fishing, as that is an area in economic difficulty throughout the nation. Manufacturing will increase in profitability, in part through a reduction in jobs. It is very clear from this data that *Indiana needs about three more arrows in its economic quiver*, particularly in the high end of financial, insurance, real estate, electronic, technical, personal and professional services. All of these service areas could have been developed in Indiana when it was an auto manufacturing leader, but most of these services were "hired out" to Chicago and Eastern banking and other service leaders. Detroit like Indianapolis would be in a very different situation if high end services had been "home grown" rather than farmed out.

This increased diversification will be particularly impor-

tant for the success of minority citizens in Indiana, as many of these newly created middle-class service jobs will be created by small and new businesses. (It is our 640,000 newly established small businesses every year that gives the U.S. a very favorable economic development, and a very low unemployment rate compared to other nations.) The support of minority, as well as white entrepreneurship, could be an excellent contribution to long-term economic development in Indiana. Economic stability demands a state economy with a diversity of generators of income. It is vital for the educational sector in Indiana to have a clear grasp of the kinds of jobs for which they are preparing Indiana youth. Some political leaders have suggested that education should prepare *all* young people for a "high tech" job, while the realities are just the reverse. At the moment, the nation is generating a very large number of "junk jobs:" for every new job for a computer programmer in 1980, the country generated *23* jobs for cashiers. It seems that Indiana has more than its share of fast food and low-paying clerical jobs. The largest number of service jobs have very poor salaries, especially when compared with manufacturing. Please see chart opposite.

We need to think about the educational preparation of all citizens, the 23 future cashiers as well as the one computer programmer. Let's look at the Indiana educational system for some answers:

PAY LEVELS: SERVICE & MANUFACTURING



Source: Lynne E. Brown, "The Service Economy," *New England Economic Review*, July–August, 1986

INDIANA PUBLIC SCHOOLS: BASIC DATA

	1970	1982	1985-86
TOTAL ENROLLMENT	1,231,000	1,000,000	966,057
9-12	355,000	336,000	460,212
K-8	876,000	664,000	505,845
PUPIL/TEACHER	*	20.1	19.1
TEACHER SALARY	$11,186	*	$24,333
PER-PUPIL EXPENSE	$ 965	*	$ 2,973
CHILDREN IN POVERTY (age 5-17)	*	*	11%
HANDICAPPED	*	10.7%	*
GIFTED	*	4.0%	*
MINORITY	*	*	23.5%
BLACK	*	*	20.3%
HISPANIC	*	*	2.5%
ASIAN	*	*	.6%
NATIVE AMERICAN	*	*	.1%
BILINGUAL	*	*	.6%

FUNDING PERCENTAGES FOR EDUCATION	1973-74	1985-86
FEDERAL	7.0%	3.7%
STATE	38.4%	58.2%
LOCAL	54.6%	38.1%

There are many changes reflected in these numbers. The rather striking increase in minority students from 11% in 1970 to 23% in 1985 is due as much to declining white enrollments as to increasing minority enrollments. The big gains in per-pupil expenditure and teacher salary look fine, but Indiana actually lost a little ground compared with other states (e.g., the U.S. average for teacher salaries in 1985-86 was $25,257). It also appears that the state is doing a good job in identifying exceptional children early enough to get them in special programs.

A *major* change is the decline in local funding for schools, with a proportionate increase in state support, following a national trend. Nationally, state funds went from 42% to 50%. It is hard to imagine how state dollars can increase without state *control* increasing. The Golden Rule seems universal—he who has the gold makes the rule. Local control has been a matter of pride in Indiana for a long time, and it is not yet clear how this scenario will play out. A very good case can be made for an *increase* in state originated tax dollars for schools in the next decade, further threatening the autonomy of local boards.

Another important issue for Indiana is when the school population will begin to stabilize. The current (highly desirable) reduction in class size from 20 to 19 came about largely because of the decline in student numbers with a relatively constant teaching force, leaving each teacher with fewer students to teach. Current birth rates do *not* support another decade-long drop of 19% in school enrollments, however, the current 24% drop in elementary school enrollments, will have to work its way through the system. Look for elementary schools to bottom out in several years, providing the beginning of a new and stable "floor" for public school enrollments. Some elementary schools in Indiana are already reporting enrollment increases, and a Census report indicates a .7% increase in Indiana five-year-olds, while Ohio has a 2.2% increase, Illinois a 3.5% increase and Missouri is up 3.4%. This means that the turn-up in Indiana will be comparatively weak. Finally, the independent schools in Indiana continue to be a small but vital sector—while 73,000 high school graduates from public schools were turned out in 1983, independent schools in Indiana produced 5,300 graduates, about 13.7%.

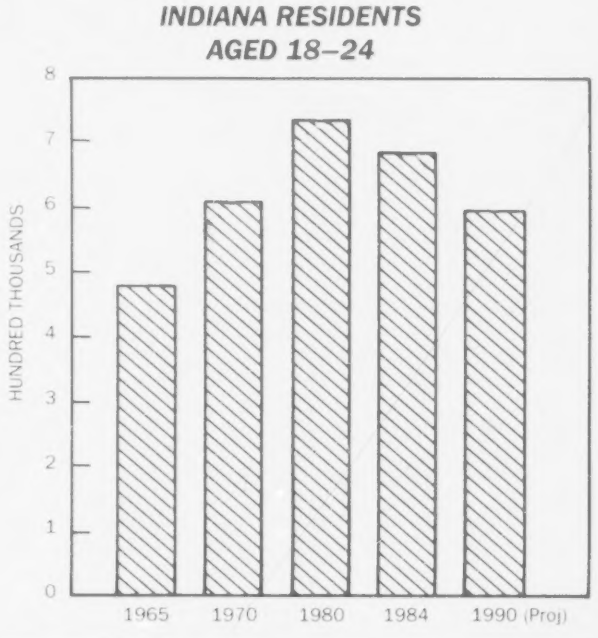
A further question concerns the increased diversity of students without corresponding diversity within the faculty who will teach them. This is a fairly new issue for Indiana, as the 10% minority era did not really necessitate a concern for teachers as appropriate role models for students, etc. However, the NEA has reported a decline of black teachers from 12% of the teaching force to 8%, with further declines likely given the small numbers of blacks preparing for teaching careers. Such factors could reduce the retention rate to high school graduation still further—as it is, about one quarter of Indiana youth move into adulthood without the benefits of a high school diploma. Given that it costs state and local revenues about $36,000 to get a young person through the public schools, this investment must be paid back through taxable income earned by the public school graduate. The chances of a dropout ever paying back the investment made in him or her is very remote, thus contributing further to the state's economic woes.

No one in Indiana benefits by having a person drop out of school. Indeed, the costs of improved retention programs are negligible compared to the costs of providing services throughout the life of a person without job skills. Consider that the average prisoner in U.S. jails has only a sixth grade education, *and* consider the fact that it costs about $24,000 to keep that prisoner in jail for a year, and you quickly get a sense of the "investment" issue. In Pennsylvania, where it costs about $3,000 to maintain a student at a unit of the state higher education system, it is *eight times* more expensive to have someone in the state pen than to have a student at Penn State. The economics are obvious—you can pay now or later.

INDIANA HIGHER EDUCATION

Although only a small number of Indiana residents have a four-year college degree themselves (about 12%—the U.S. average is 16.3%), higher education is an important element of the state. Its 72 institutions of higher education (24 two-year, 50 four-year and graduate, including 8 doctoral granting institutions) seem unusually attractive to students from other states—23% of all students in Indiana colleges and universities (17,198 students in 1986) migrated into Indiana for college. Considering that Indiana graduates about 78,000 high school students a year, and that entering students in Indiana colleges and universities totalled 53,046 in 1984, including about 5,000 out-of-state freshmen, the state could do better in "converting" high school graduates to college freshmen.

A problem has been the rapid decline of young people of "college age" in Indiana:



INDIANA RESIDENTS AGED 18-24:

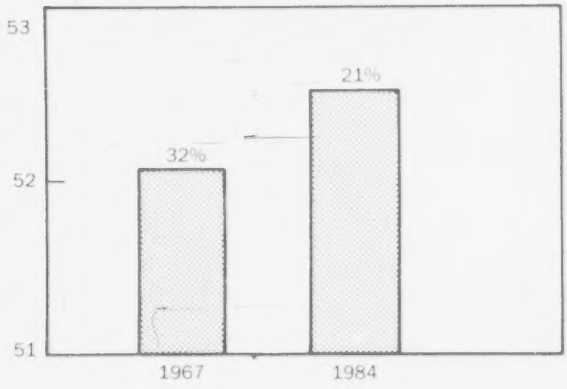
1965	1970	1980	1984	1990 (proj.)
483,000	607,000	737,000	685,000	592,000

The independent sector of Indiana higher education remains healthy in *numbers* of students, even though they represent a declining *percentage* of all Indiana registrations:

INDEPENDENT HIGHER EDUCATION ENROLLMENTS:

1967	1984
52,052 (32%)	52,536 (21%)

INDEPENDENT HIGHER EDUCATION ENROLLMENTS



Public institutions were enrolling 192,618 students in 1984. In some ways, the *public* institutions in Indiana will be in greater jeopardy due to falling enrollments, as the independent institutions have been stable and are not "used to" paying new bills by increasing the number of students. It would appear that, unless Indiana institutions can substantially increase their enrollments of either out-of-state students or "older" adults, a continual decline can be projected from current public school enrollment figures already presented.

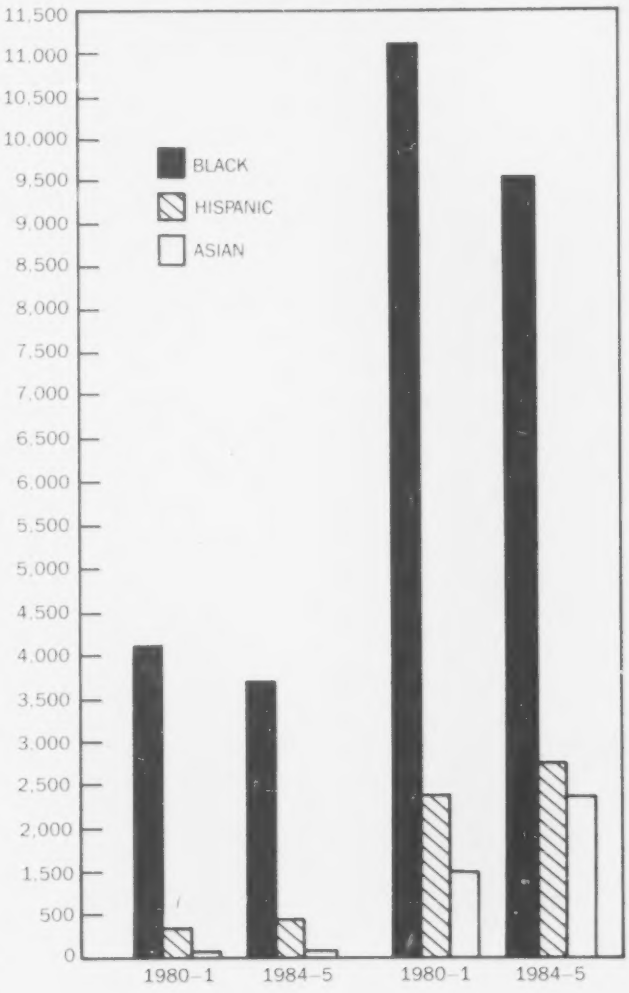
Indiana has put a major effort into higher education funding, up 17% from 1982-83 to 1984-85, the highest increase in the Great Lakes states. However, on most measures of tax *effort*, Indiana remains low.

Minority enrollments moved up from 6% of total enrollments in 1972 to 8% in 1982. However, it appears that there is a current decline in minority enrollments in some areas:

CHANGES IN MINORITY ENROLLMENT 1980-81 TO 1984-85:

	TWO YEAR		FOUR YEAR	
	1980-81	1984-85	1980-81	1984-85
BLACK	4,178	3,637 (−12.9%)	11,145	9,496 (−14.6%)
HISPANIC	369	438 (+18%)	2,397	2,735 (+14%)
ASIAN	152	131 (−13%)	1,510	2,395 (+58%)

CHANGES IN MINORITY ENROLLMENT 1980–81 TO 1984–85



It is interesting to track the tendency of Asian American students to "level up" in terms of the institution they attend: if admitted to a community college and a four-year school, they will generally seek out the highest level of institution to which they can be admitted. This trend also holds for graduate and professional school enrollments.

One of the problems Indiana does *not* have is a highly tenured faculty. While 82% of the public institution faculty

in California is tenured, only 60% of the public faculty in Indiana has tenure. This is going to be an increasingly important item for strategic planning, as heavily tenured institutions will lose their flexibility to add new courses as new areas of knowledge develop. In this regard, and given the state's recent increases in higher education funding, one can be optimistic about Indiana higher education. However, with declining student enrollments coming through the public schools, and a significant increase in the percentage of *minority* public school enrollments, Indiana higher education will have to see some major efforts to attract and retain qualified minority students for Indiana higher education, or else suffer disproportionate losses in enrollment.

The ACE 1986 "box score" gives Indiana rather good ratings on efforts to *recruit* minority students, but a very low grade on efforts to *retain* minority students through to graduation. This may be the time to engage in efforts at enrollment management—a coordination of efforts from recruitment to graduation. Such efforts would show benefits for many years to come in Indiana.

Indeed, as one looks at Indiana's future, several things stand out about the educational system and areas of concern. **First,** the retention rate to high school graduation needs to be improved. **Second,** the entire educational system needs to have a better sense of the future job structure in Indiana so that they can plan for the jobs that *actually will be available*. **Third,** the state needs a coherent youth policy, especially for minority youth, who will be increasingly important in the years to come.

GENERAL CONCLUSIONS

Indiana is a fascinating melange of "Heartland" values (people living in houses that they own, and with a person they're married to), and a long standing economic commitment to manufacturing. Partly because people have done well in manufacturing *without* high levels of education, a small proportion of adults possess college degrees. At the moment, many new jobs in Indiana are from the low end of services—"junk jobs" that pay very little compared with the manufacturing jobs they are replacing. If Indiana is to develop a healthy and diverse economy, it must *build a middle into its service economy and work force*. No clear signals are being sent to the educational system regarding the kinds of jobs that Indiana will create in the next decade. Manufacturing in Indiana will not go away, but jobs which pay very well for workers with limited, easily automatable skills will clearly be a thing of the past. Productivity increases will mean *jobless growth*, especially in manufacturing.

Due partly to declining white birth rates, minorities become a more important part of Indiana's future. The size of the black middle class should become an issue in Indiana's future prosperity—if it declines in numbers or earning power, the state is in economic trouble. The same can be said with smaller numbers for the Hispanic and Asian American middle classes. With these comments in mind, consider the following suggestions for Indiana's future:

1. Given limited ethnic diversity, relatively good income levels, low crime rates and stable individuals and families, the retention rate to high school graduation should be higher. There is no reason why, in Indiana, one out of four youth begin adult life without a high school diploma, when in Minnesota only 10% start adult life with that handicap. Serious attention needs to be given to the problem, especially to "front loading" resources to the early years of elementary school to ensure that students get off to a good start. It is easier (and cheaper) to *keep* students on grade level performance after early successes than mounting a crash program for tenth graders to try to make up for nine years of neglect and failure. The state also needs to think about how day care and early childhood education fit into this equation. There is no question as to the capacity of the state's educational leadership—they can do the job. A tune-up is needed, not a major overhaul.

2. Some link needs to be made between the state's public schools, higher education and businesses on the issue of *jobs for Indiana's future*. Attention has been focused on the problem, but now is the time for some coordinated efforts. New jobs in Indiana, according to the Bureau of Labor Statistics, have a disproportionate number of fast food and cashier jobs, and still some new manufacturing jobs. What is missing is the high end services. *New jobs are not the province of Fortune Five Hundred companies;* most come from new small businesses, and that is an area Indiana needs to develop. The Federal commitment to the Small Business Administration is ambiguous, but state efforts in small business set-asides could easily be increased. This area could be worked on by schools, colleges, businesses and local/state government units.

3. Indiana schools of education need to give particular thought to the preparation of public school teachers who will reflect the changing Indiana student population, especially the increasing minority populations. Particular attention should be given to the urban areas of Indiana, in terms of preparing a *leadership* cadre of teachers, both new and experienced, with new skills in retaining students and keeping them performing at grade level. Such an effort, combining schools of education with public schools, and with other university areas of expertise when needed, could provide a model for other states who are also trying to maximize the performance of a more diverse public school student body.

4. There is a danger in the next decade that cities like Indianapolis could become places where the rich and poor live, but not the middle, in that housing, shopping *and* jobs have now moved to the suburbs. Although Indianapolis has lost ground, there is still time to regain that ground, unlike many major cities that seem to have no "core" left, only suburban jobs, bedrooms and shopping centers. It is vital that Indiana begin to put in place programs designed to prevent further erosion of jobs and housing stock, while at the same time attracting new urban development and small business starts. The school leadership in cities like Indianapolis and Gary-Hammond needs to be full partners in such ventures.

5. Although Indiana has a tradition of independence and local autonomy, the recent increase in state funding for public schools could be a cause for concern, particularly if the result seems to be an erosion of confidence in local boards of education. There seems to be no evidence of that trend at present, but it is a factor to be watched.

6. The small increases in Hispanic and Asian American college students need to be assessed in terms of the rather sharp decline in black students, a much larger number. Indiana can take some steps to ensure that minority representation in higher education is at least maintained at present levels. ACE's "box score" suggests some successful efforts at minority *recruitment* in Indiana, the next step may be a comprehensive approach to enrollment management which would increase *graduation* rates as well.

7. Most important, Indiana has the luxury of a little time. The changes that are coming are slower and more gradual than those of many other states. Given the stability of the state, and the knowledge that today's Indiana children *will* be the Indiana adults of tomorrow, strategic planning, environmental scanning and issues management should be more than just gong words in Indiana, as there are resources and time to deal with the issues.

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INDIANA—SUMMARY OF MAJOR POINTS

1. Indiana is a fascinating mix of Great Plains (Heartland values), Great Lakes (manufacturing, large cities, diversity) and a little Dixie thrown in at the bottom. A very large number of its citizens live in homes that they own, and live with someone they are married to—an idea that seems quaint in certain parts of the U.S. It is a very stable state in population terms—only 1/4th of the people came to Indiana from another state. The 10% adult minority population will increase to 23% minority in the future, as that is the current rate in public schools.
2. The Indiana economy is in drastic need of more diversity, particularly in the middle and high levels of the service economy in financial, technical, electronic and business services. New jobs in these areas will be generated by new small businesses, which need to be encouraged by *state* leadership.
3. Indiana was at one time a major auto manufacturing center, not a subcontractor for Detroit as it is at present. If it had developed the financial and business services that go with auto manufacturing at the same time, the state's economy would be in a very different condition today—greater diversity in areas with many middle class jobs. At the moment, a large number of jobs coming on stream in Indiana are low-paying "junk jobs" that pay "chump change" and have almost no opportunities for advancement. This area is one in which the state's education, government and business leadership needs to work more closely together.
4. Gary-Hammond and Indianapolis rank 10th and 11th respectively in the percent of black men who make middle incomes—defined as $25,000 to $50,000. Although black suburban residency is a problem (the rates are very low), black *income* levels are commendably high, and efforts need to be made to perpetuate and expand the minority middle classes in Indiana.
5. After a long (and gradual) decline in youth, Indiana will show a *small* turnaround in the next decade (birth rates are creeping up a little) but youth will increase more rapidly in the neighboring states of Ohio, Illinois and Missouri. The small increase in Indiana youth will be significantly minority.
6. Indiana schools do not need a major overhaul, as is true in some states—but they do need a tune-up, particularly in *increasing the percentage of youth who complete high school.* Of 83,966 students who were ninth graders in 1980, 65,710 (78.3%) graduated from high school in 1984. This is actually a slight improvement from earlier years, but Indiana can do even more.
7. Although few Indiana adults have college degrees (12.5%), higher education in the state is an important activity, and public higher education funding has been increasing. A large number of college students come to Indiana from other states to study. The independent institutions of higher education, although declining as a percentage of enrollment, have been almost constant in numbers of students. A low tenure rate will alleviate some problems of inflexibility that will plague other states with higher levels.
8. Looking selectively at initiatives in Indiana, developing a larger number of well paying service jobs, increasing the number of youth who graduate from high school, increasing minority enrollment and graduation from higher education institutions, and providing better early childhood and day care as an increasing percentage of women enter the Indiana workforce, would be a recipe that could significantly improve the quality of life for Hoosiers for decades to come.

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NEW YORK:

NEW YORK-NEWARK-JERSEY CITY
(PART)

THE STATE AND ITS EDUCATIONAL SYSTEM

BY HAROLD P. [illegible]

THE INSTITUTE FOR EDUCATIONAL LEADERSHIP, INC.

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Errors of fact and interpretation, however, remain the responsibility of the author.

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Cover Note:
This map of New York reveals populations as a road map reveals highways. New York is *very* urban, with 90% of its population living in its 12 metro areas. You can see the three "New Yorks:" 1) The City; 2) Upstate (Buffalo to Albany) and; 3) Everything Else. In thinking about the state's future, these areas are the social equivalents of mountains, rivers and roads. "People Maps" like this one are becoming increasingly important tools for politicians, marketers of products and services, and even educators!

Cover and Graphics Design: Tony Browder, East Koast Graphics, Inc.

NEW YORK:
THE STATE AND ITS EDUCATIONAL SYSTEM

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NEW YORK: THE STATE AND ITS EDUCATIONAL SYSTEM

No state has worked harder on its educational system over the years than New York. When de Toqueville came to America in the 1830's, two of his first stops were New York City and Albany (the legislature being referred to as the "Cave of Winds"). Prison reform was his topic, and in New York he saw prisoners being readied for re-entry into normal life *through educational programs*. He came away feeling that New Yorkers (and the U.S., but to a lesser degree) had an almost pathological faith that education could change anything and everything. It was *the* tool for forging the new America. With wildly diverse groups of immigrants, education provided both a common framework and a set of aspirations for individuals. Entrepreneurship was the name of the game in New York, then as now. Toqueville's most trenchant observation was that in America, the smartest people did not go into either government or the professions, but into the making of money, especially in New York.

Some things never change. In 1987, New York City remains the haven for those smart people who intend to make money. These are not salaried people but entrepreneurs who live by their wits and commissions. Since Toqueville, law and money have come together in a new relationship. The largest "export" of dollars out of New York City is for *legal services*. The Eastern shuttle carries hundreds of lawyers and financiers daily who live in Washington, D.C. but *must* be a part of the New York establishment. The high end of the service economy is "bicoastal," with financial, legal and entertainment people flitting from Los Angeles to New York. Broadway remains the theatre center. Publishing firms, alive and well after their best year in history in 1986, are heavily concentrated in New York and in the East, which is where most book purchasers live.

And in the *educational* arena, New York has produced some memorable achievements as well (with one exception, which we will get to later). For more than three decades, the Board of Cooperative Education Services (BOCES) has served as a model for the rest of the country in terms of intermediate service delivery. The idea is spreading rapidly at present. The state testing program (Regents Exams and PEP Tests) has maintained standards through thick and thin, and has provided a common denominator for assessing individual and district performance.

New York maintains the largest state financial program for higher education, including the very successful TAP Program. The Regents External Degree Program represents a national model for assessing people on a performance, as opposed to "seat-time" standard. It has transformed the lives of people in New York State and out. The articulation of secondary schools and colleges in terms of requirements has been exceptionally well coordinated. The diversity of public and independent educational institutions has been seen as a strength rather than a threat. And the Regents themselves have basically functioned to put educational priorities uppermost, and political considerations secondary. (This seems a matter of debate at the moment within the state.)

The futurists gave New York State short shrift due mainly to the outmigration of 4% during some of the 1970's. But they totally misread the state's resiliency and the strength of its economy. In the beginning of 1987, we can see a new historical phenomenon of major dimensions—a reversal of the decades-old migration to the South and West. Texas has attracted people from the Midwest, Northeast and Southeast, and has "thrown" people west to California since the 1940's. Today, however, the migration to Colorado and Arizona from Texas has stopped—these states are sending more people to Texas than Texas is sending to them. And migration to California from Texas has slowed to a crawl.

More people are moving from Texas to the East—Florida, Tennessee, Georgia, Alabama, North Carolina and Virginia—than are moving *to* Texas from those states. In 1986, more people moved from Texas to *Michigan* than moved from Michigan to Texas! And Florida, long the loser in migration to California and Texas, is in 1987 the net winner, with more people moving to Florida from Texas and California than are going the other way. What *may* be developing is a circular pattern of movement—to California from the Northeast and Midwest, then back up the Atlantic coast. (There never *was* a Sunbelt, there was California, Texas, Arizona and Florida, and that's it.)

New York has always contributed to the migration to Florida and to California, but not to Texas. (Texas has sent few people to New York also—perhaps Texans feel

silly on subways, and New Yorkers feel odd in cowboy hats.) But we are now seeing a small but historic shift of people *back* into New York from the Southeast and Southwest, as well as from other northeastern states. Massachusetts follows the same flow. Apparently New York is *increasing* in its appeal to migrants from a variety of regions, particularly as the economies of many southwestern and southeastern states falter. Enrollment in New York elementary schools has begun to move up slightly. To begin our analysis of New York in detail, let's look at the state's characteristics:

NEW YORK PROFILE

1980 POPULATION	2nd	17,588,072
BLACK POPULATION	1st	2,402,006
PERCENT BLACK	14th	13.7%
HISPANIC POPULATION	3rd	1,659,300
PERCENT HISPANIC	6th	9.5%
ASIAN, PACIFIC ISLANDS	*	310,526
PERCENT ASIAN	*	1.8%
OTHER MINORITY	*	884,672
PERCENT OTHER MINORITY	*	5.0%
FOREIGN BORN	3rd	13.6%
MEDIAN AGE	5th	31.8 years
OVER 65	14th	12.3%
UNDER 18	45th	26.7%
COLLEGE GRADUATES	14th	17.9%
MARRIED COUPLE HOUSEHOLDS	50th	54%
OWNER OCCUPIED HOUSING	50th	48.6%
PER CAPITA INCOME	14th	$7,500
RETENTION TO HIGH SCHOOL GRADUATION	45th	66%

*Data not available

From these numbers we can see New York's outlines—a very large state with great diversity of population, 90% of whom live in one of the state's 12 metropolitan areas. Minority populations are very large (30% of the state's population), but because of the state's overall size, no one minority group has the clout its numbers would suggest. (With 2,400,000 black persons, the largest in the nation, New York is only 13.7% black, due to the large size of the state's total population. Hispanics are the same—1,659,000 people, but only 9.5% of the state's total.) But overall, New York is a state with 5,256,504 minority members of its 17 million person total, almost a third of its people.

Unlike California, Florida, Texas and Arizona, whose minority populations have increased dramatically in the last decade, New York has had a long history of significant minority participation, being the major staging area for each previous wave of immigration to the U.S. In fact, New York City is still working on the immigration wave of the 1920's—Poles, Italians, Czechs, Ukranians—while it is heavily involved in the 1980's wave, 83% of which comes from South America and Asia. The Statue of Liberty faces Europe, of course, which is why Los Angeles Mayor Bradley plans to develop a California version of the Statue of Liberty which will, presumably, face Asia and South America.

Our cover map of the State provides another insight—there are three parts of New York: The City (even in Paris, New Yorkers will say "I have to go the The City," meaning New York), Upstate (all the cities from Buffalo to Albany), and Everything Else. Long Island is increasingly considered a part of The City, even as it develops its own powerful economy, and more commuters live *and* work on The Island.

The average age of people in New York is very high, not because of the large numbers of elderly (only about 12%) but because of the major decrease in youth. Although the numbers are small, people over 85 gained 44% from 1970 to 1980, while youth under 15 declined 24%, both because of decreased fertility and outmigration of young adults in the childbearing years. Being short on the young and old, New York is naturally strong in middle-aged Baby Boomers, just moving into their peak earning years. Of the Baby Boomers, my guess is that New York and California tie in having the largest number and percentage of "Yuppies," although New York City can claim the area with the largest number of "Buppies"—black urban professionals—which is clearly Nassau-Suffolk. Nationally, about 25–30% of the 70 million Baby Boomers can be termed Yuppies. They tend to live alone (New York State is *50th* in married couple households) and, hopefully for this reason, tend not to have children.

For a big, diverse state, New York is 11th in per capita income ($10,260 in 1980), a major achievement. About 18% of the citizens are college graduates, well over the national average, although an equally high number of adults do not have a high school diploma. The state is second in the number of patents awarded to residents, and is a major center of high technology as well as the high-end service industries, as we shall see. There is only one major "downer" is all these numbers—New York ranks *45th* in the percentage of ninth graders in 1980 who graduated from high school in 1984—66%, compared to a national average of 74%, and a high in Minnesota of 96%. We shall explore this issue in depth shortly.

We can learn much by looking at the patterns of movement into and out of the state:

NEW YORK POPULATION MOVEMENT: 1975–1980

	ALL	WHITE	BLACK	HISPANIC
IN:	1,072,612	753,971	137,832	167,513
OUT:	1,721,275	1,444,000	186,877	133,061
NET:	−648,663	−690,029	−49,045	+34,452

The "velocity" with which whites left the state was great—twice as many left as arrived. The leaving rate was less for blacks. However, the "net" shows a total loss of 749,074 whites and blacks, but a *plus* of 34,452 Hispanics! Just as two cars approaching each other from opposite directions at 50 miles an hour will pass one another with a "net" of 100 m.p.h., the loss of whites and blacks has heightened the Hispanic increase enormously. The same phenomenon can be seen with Asian-American increases in New York. Some will say that this only applies to downtown New York City, but it applies equally to the pinnacle of success, Westchester County:

WESTCHESTER COUNTY MIGRATION: 1975–1980

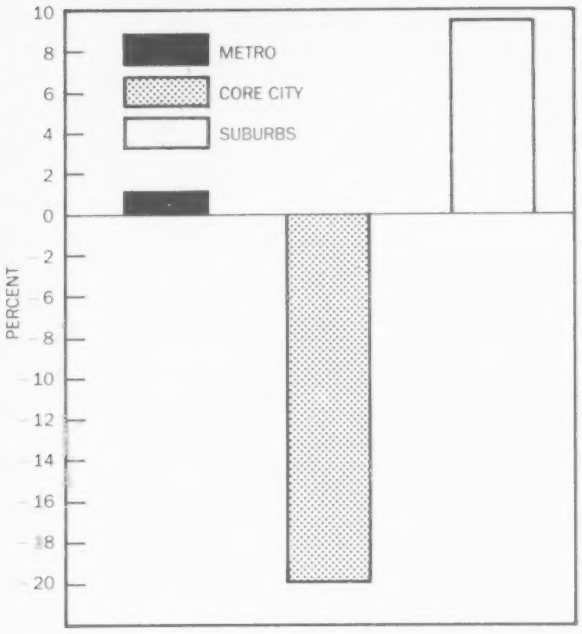
	ALL	WHITE	BLACK	HISPANIC
IN:	140,882	111,004	16,925	12,685
OUT:	156,014	138,733	13,484	7,137
NET:	−15,192	−27,729	+3,441	+5,549

While Westchester was losing 27,729 whites, it was gaining 8,989 minority residents. In fact, all of New York's metro areas have been characterized by declining core cities and expanding suburban populations, even though the state's total declined 4%. Minorities have generally played a part in the suburban migration in New York, which helps to explain why minorities move to New York and stay, while whites tend to leave more than they move in. (The next few years clearly will see an increase in people of all ethnic backgrounds moving to New York, as its economy continues to offer opportunities.) Rochester has been typical of most metro areas in New York:

ROCHESTER URBAN DEVELOPMENT: 1970–1980

	1980	1970	NET
METRO:	971,230	961,516	+1%
CORE CITY:	241,741	295,011	−18%
SUBURBS:	729,489	666,505	+9.4%

ROCHESTER URBAN DEVELOPMENT 1970–1980 (NET)



The "middle" of the economic distribution has moved out of the core city in every metro area in New York. More importantly, the new suburban centers need to be seen, not as "bedrooms" for the 12 metros, but as places where people live *and* work, due to the rapid growth of the service economy. Already, in places like Buffalo, Rochester, Albany, Syracuse, as well as "The City," going downtown is becoming a special event, as people live their lives in the suburban growth corridors. Cities could afford to allow bedroom suburbs, as long as people came downtown to *work*, allowing a taxable revenue base. But if homes *and* jobs leave the core cities, their economies are in trouble. Even the current revitalization of many core cities—Baltimore, Boston and Washington, D.C. leap to mind—pales when contrasted to the growth in suburban growth corridors for those areas. The major reason New York State has been virtually "recession-proof" has been its very diversified economy. In the following chart, the first column indicates the percentage of the total New York work force in that area; the second indicates the economic output of that area compared to the rest of the nation, the average index being 100:

NEW YORK: WORK FORCE AND INDUSTRIES

	% OF WORKERS	INDEX
AGRICULTURE, FORESTS, FISH, MINING	1.3	33
CONSTRUCTION	3.7	63
MANUFACTURING	20.9	93
TRANSPORTATION, COMMUNICATIONS	8.2	112
RETAIL, WHOLESALE TRADES	19.3	95
FINANCE, INSURANCE, REAL ESTATE	8.3	138
BUSINESS, REPAIR, PERSONAL SERVICE	9.4	112
PROFESSIONAL SERVICES	23.6	116
PUBLIC ADMINISTRATION	5.2	100

If one assumes that agriculture, mining and manufacturing are areas of great difficulty in the American economy, and if one also assumes that the "high end" of the service industry is in very good shape, especially financial and technical services, then *New York State has the healthiest work profile in the nation.* (California, its major competitor, has a greater dependency on its $14 billion agricultural economy, which is buoyed up by its *$28 billion* in defense contracts. It is decidedly weaker in professional services. California's "high tech" industries will have tough going in the next decade, as the policy of jobless growth makes itself felt.)

This emphatically does not mean that New York is free from economic blemish, but if *diversification* is the name of the state economic game, then New York has a commendable number of arrows in its quiver. Even in "high tech," which is very hard to define, New York has, like Massachusetts, concentrated on R and D and services rather than high tech manufacturing, which will be a soft spot in the future. As long as companies like IBM, Bell Labs and GE like New York, not to mention the arts, the stock market, doctors and most of the major law firms, the state should continue to do well.

There are a few other statistical "odds and ends" we should consider before turning to the state's educational system. First of all, to establish New York City as the "hub of hubs," we only have to look at the top eight airline connections in terms of frequency of flights for December 1980 (see chart opposite).

These data make even clearer the central fact of American demography—80% of the American people live in the Eastern or Central time zones (see chart on next page). For these people, New York City is, in most respects, the most important city. Although most of us think of New York State as a transient population, only 31% of its population was born in another state, compared with 78% in Nevada. It is closer to Pennsylvania (only 19% of its citizens were born outside the state) than Nevada. There is a stability about New York, particularly "upstate," which contributes to social cohesion.

FREQUENCY OF FLIGHTS
December, 1980

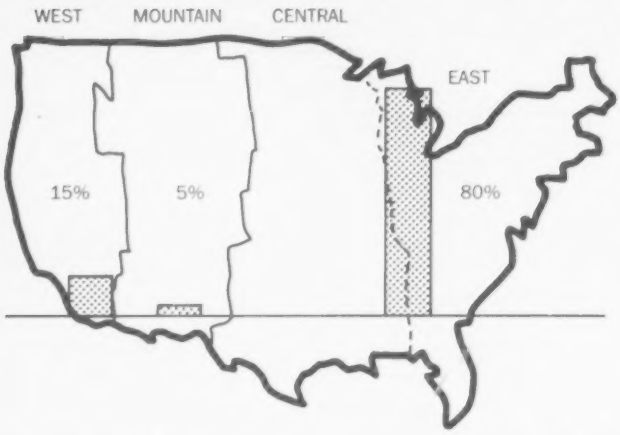
Dallas–Houston	3,462
Los Angeles–San Francisco	3,069
Chicago–New York	2,534
New York–Washington	2,037
Atlanta–New York	2,029
Boston–New York	1,842
Miami–New York	1,767
Ft. Lauderdale–New York	1,381

NEW YORK STATE SCHOOL ENROLLMENTS: 1970–1982

	1970	*1982*	*NET*	*U.S.*
TOTAL STUDENTS	3,477,000	2,719,000	−21.8%	−13.9%
GRADES 9–12	1,029,000	957,000	− 7%	− 6.2%
GRADES K–8	2,448,000	1,761,000	−28.1%	−16.7%

	1984–85	*1985–86*
TOTAL STUDENTS	2,631,059	2,608,500
GRADES 9–12	1,325,675	1,280,900
GRADES K–8	1,305,384	1,327,600

PERCENTAGE OF RESIDENCE BY TIME ZONE



Transiency relates to criminality, as can be seen in Nevada's rating of #1 in murders per 100,000 people with 20. No one else even comes close. (New York State is 10th with a rate of 12 per 100,000.) Even with Hill Street Blues and its view of New York, The City is actually 12th in murder with a rate of 25.8 per 100,000. Although The City has the largest police force (22,590) if one thinks of police per 10,000 people, Chicago, Detroit, Philadelphia, Baltimore, Washington and many others have more. (The murder capital of the U.S. is *actually* St. Louis, with a rate of 49.9 murders per 100,000. East St. Louis contributes heavily to this number.) New York, City and State, *do* lead the nation in one kind of crime—robbery: 641 per 100,000 in N.Y. State and a heavy *1429* in The City. (To be fair, with that much per capita wealth, almost anybody in New York City is *worth* robbing. Criminals are not stupid.)

Somewhat surprising is the State's remarkably low divorce rate—384 divorces for every 1,000 marriages. The U.S. average is 490, and leading the pack is Arkansas, with *864* divorces for every 1,000 marriages. And although the stability is nice, New York State ranked 43rd in the percentage of eligible voters who voted in the last presidential election, right with Pennsylvania and California. Being 4th in the percent of state revenues derived from personal income taxes, New Yorkers pay heavily for services, but the quality is generally well above average. (Try getting snowed in in New York and in Ohio, and compare how long it takes for the roads to be plowed.)

There is one area, however, in which New York reigns supreme, and that is abortions. For every 1,000 live births

NEW YORK SCHOOL PROFILE

	1973–74	1985–86
PERCENT OF NINTH GRADERS GRADUATING FROM HIGH SCHOOL	*	66%
PER PUPIL EXPENDITURES	$1,829	$5,616
TEACHERS SALARIES	$14,700	$30,200
FUNDING—FEDERAL	5.4%	3.6%
FUNDING—STATE	38.9%	43.9%
FUNDING—LOCAL	55.8%	52.5%

CHILDREN (5–17) IN POVERTY	17.9%	(1980)
CHILDREN IN HANDICAPPED PROGRAMS	10.9%	(1982)
CHILDREN IN GIFTED PROGRAMS	3.5%	(1982)

*Data Not Available

in the state, 666 abortions are performed. With that high an abortion rate, it is no surprise that the State's *birth* rate is so low. In Mississippi, there are 96 abortions per 1,000 live births. If the ethics of abortion can be put aside temporarily, the *demographics* would suggest that in Mississippi, a large number of children will be born into poverty, without the resources to ensure their maximal development. Those same children in New York would not be born. There are many social policy consequences of this major difference between Mississippi and New York, both in terms of economic and human development.

To summarize, New York is a very large, ethnically diverse state with a considerable amount of social stability. Its population is old, due not to large numbers of elderly but largely to the comparatively small number of children born. It is a middle-age state, whose economy has the virtues of deversification and flexibility, particularly in the high end of the service economy. Black, Hispanic and Asian-American middle classes are found in New York, increasingly living in the suburban growth corridors of the state. Citizens have come to expect a high level of quality in the social services they have paid income taxes for, particularly in terms of educational services, an area the state has been dedicated to for most of its history. In one recent study of "level of effort" in raising revenues, New York was first with an index of 171. (The U.S. Average was 100.) Let's now look at that educational system, starting with the school systems and then discussing higher education.

NEW YORK STATE'S SCHOOLS:

During the period 1970–1980, New York State's total population declined 4%, from 18.2 million to 17.5 million. The public schools declined 21.8% from 1970 to 1982.

The school-age population declined in New York far more than the population as a whole, an more than the average for U.S. schools. In addition, the younger the children, the steeper the decline, at least until 1985–86, when early elementary enrollments showed some increases. This means that the much smaller populations will be working their way through the state's schools into the high schools, which should see declining enrollments for another decade, and then begin a small turnaround. The rest of the country had seen small enrollment increases in early elementary before 1985–86 while New York was still declining.

SELECTED RETENTION RATES

	1980 ninth grade	1984 twelfth	percent graduates
1. Minnesota	57,701	55,376	96%
2. North Dakota	9,549	8,569	89.7%
3. Iowa	42,372	37,248	87.9%
4. South Dakota	9,862	8,638	87.6%
5. Nebraska	21,626	18,674	86.3%
6. Utah	22,846	19,606	85.8%
7. Montana	12,051	10,224	84.8%
8. Wisconsin	73,603	62,189	84.5%
9. Kansas	31,755	26,730	84.2%
10. Hawaii	12,514	10,454	83.5%
11. Alaska	6,639	5,457	82.4%
12. Vermont	7,392	6,002	81.2%
13. Wyoming	7,121	5,764	80.9%
14. Pennsylvania	163,976	132,412	80.8%
15. Colorado	40,937	32,954	80.5%
16. Ohio	158,882	127,837	80.5%

New York schools are now 36% minority, up from 25% in 1970, a rather gradual increase. However, the 19% black school population is more stable than the 14% Hispanic and 3% Asian-American population, both of which are increasing. The declines have been in the white school population, which is why the *percentage* of minority students will continue to increase, but much more slowly than in California, Arizona, Texas and Florida. Some other factors regarding New York schools are found on the previous page.

Looking at this data *in toto*, New York clearly spends tons of money on schools and teachers, has been able to maintain local control of funding even though state funding has increased, cares about special groups of young people like handicapped and gifted students, and works hard on getting poor and minority children to achieve at a high level. The only mystery in all of this is *the surprisingly large number of youth who do not complete high school*. Let's pursue two hypotheses about this crucial issue:

1. New York is just like all other big urban states with big centers of poverty in core cities: there is a certain amount of truth to this statement, particularly if we look at the "leaders" in the retention race (percent of ninth graders in 1980 who graduated "on time" in 1984). Please see chart opposite.

Our thesis holds for the "top thirteen," and then goes into reverse. With New York in 46th place, how is it that Pennsylvania comes in 14th and Ohio 16th? Both are highly urbanized, both have established poverty areas within their big metros, and yet both do amazingly better than New York (264,763 ninth graders with 174,762 graduates for 66%, a little below California (69%), Texas (69%) and Florida (67%). 90,000 ninth graders in New York did not graduate "on time."

We need to admit that retention studies are not an exact science, but like EPA mileage ratings, the *ranks* are generally correct even though you may never get the exact mileage indicated for your type of car. The above numbers come from the Department of Education, and, although there is no single uniform procedure for calculating 9th to 12th grade rentention (the problem is more complex than it at first appears), retention numbers from various sources are quite similar. We, therefore, cannot buy the "all big states are at the bottom of the retention hierarchy" argument.

2. New York City is so big, and represents so many challenges, its low retention rate causes the norms for the whole State to be depressed: on the surface, this argument seems plausible. However, Ohio and Pennsylvania also

have large metro areas with much ethnic diversity and very well established poverty centers. Although New York City with its 9 million people in the metro area represents more than half of the state's 15 million people, Philadelphia and Pittsburgh represent about the same urban domination for Pennsylvania, (7 million of the state's 12 million total) although the state does much better on retention. The best study available on retention in New York City, *Dropouts from New York City Public Schools, 1982–83*, done by the Educational Management Information Unit and published in 1984, shows that New York City graduates about 60% of its ninth graders "on time." (This study also represents the kind of careful, thorough approach other states might use.) About 90,000 young people begin adult life in New York State each year without a high school diploma, but only 28,000 of these are from New York City Public Schools.

The answer to our question—why do Ohio, Pennsylvania, New Jersey, Illinois and Michigan do so much better on retention than California, New York, Florida and Texas?—remains elusive. It is *not* a result of statistical game-playing, and it is a crucial question for the states that are low on this "productivity" measure, both in terms of human and economic development.

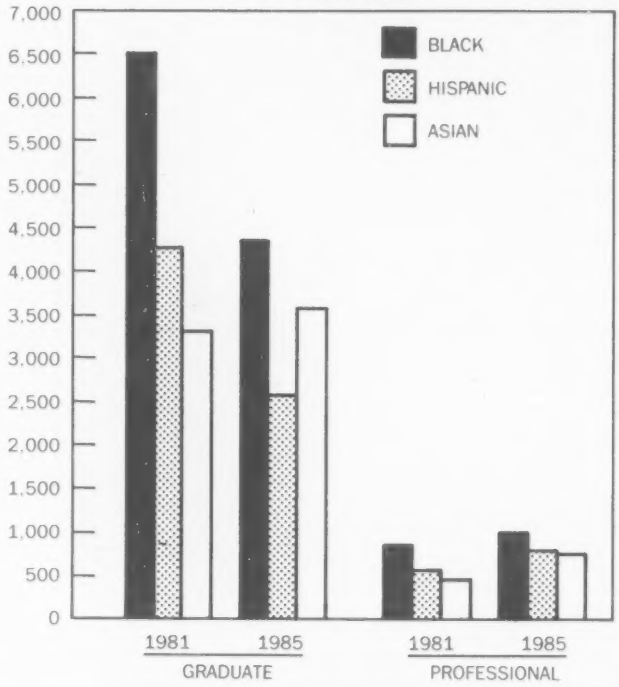
It costs at the least about $48,000 in 1986 dollars to get someone from grade one to high school graduation. In New York State, 34% of youth will be unlikely to generate enough income (without a diploma) to pay local and state authorities back, through taxable income, for the cost of their public school education. Given New York's outstanding record on commitment to and investment in education at all levels, the question needs to be considered very carefully. The fact is that in 1980, 80% of the 16–24 years olds committed to the State's correctional facilities were high school dropouts. Prisoners are about 8 times as expensive as college students, as an investment of public funds. So far, citizens have supported the schools fully, but in 1960, 59% of the voters had a child in school, while today it is about 21%. Somehow, the return on the huge New York investment in the schools needs to be increased. No easy solutions come to mind, as the state has done virtually all the right things.

NEW YORK STATE HIGHER EDUCATION

Once a student graduates from high school, the chances for college-going are very good indeed, compared with other states. (Pennsylvania, very good at getting people through high school, is not as good at "converting" them to college student status.) Only 18% of New York high school graduates go outside of the state for college, a very low rate for an Eastern state (New Jersey hovers around 40%). This low rate is a tribute to the perceived quality of New York higher education, and to an exceptional state student loan program for both public and independent higher education.

New York has more institutions of higher education than any other state, depending on how you count them: in 1983 there were 296 institutions of higher education, 86 public, and 210 independent ones, including proprietary control, etc. Independent educational institutions are very important in New York. Among secondary school graduates in New York, about 32,000 are from independent schools; about 198,500 from public schools. In higher education, about 83,000 bachelors degrees are conferred each year, about 30,000 from independent institutions (18,000 from Catholic institutions alone) and 50,000 from public institutions. For all students at all higher education levels, there were 572,000 students in public institutions and 442,000 in independent ones. In terms of enrollment, independent higher education is a bigger "cut" of the pie than independent *schools* are. They represent a very broad

NEW YORK GRADUATE ENROLLMENT BY ETHNICITY



NEW YORK GRADUATE ENROLLMENTS BY ETHNICITY

	Graduate		
	1980–81	1984–85	Percent
Black	6,551	4,312	(−34%)
Hispanic	4,252	2,550	(−40%)
Asian	3,266	3,542	(+7%)
	Professional		
	1980–81	1984–85	Percent
Black	846	996	(+17%)
Hispanic	565	769	(+36%)
Asian	477	757	(+58%)

range of programs and clienteles. In addition, the state's total facilities for the continuing education of adults in business, industry, the military, and through the state's own educational resources are unequalled.

Student ethnicity presents a mixed picture in New York. In two-year institutions black students gained from 29,200 in 1980 to 37,700 in 1984, Hispanics increased from 16,600 to 22,400, and Asians doubled from 2,700 to 4,800. However, in four-year programs, blacks declined from 68,100 in 1980 to 64,100 in 1984, Hispanics from 32,700 to 33,400, and Asians up from 15,000 to 20,100. Compared to the nation, New York showed significant gains except for black students in four-year programs, and the black decline was much smaller than in the nation.

Once again, it is clear that Asian students "level up" by going to the *highest* level of institution they are admitted to, unlike black and Hispanic students. During these years, Asian students in Pennsylvania and New Jersey were increasing 2% in two-year institutions and *58%* in four-year programs. One wonders why a drop in Asian students in New York with major increases in surrounding states. Overall, the New York data supports a national trend of a major drop in minority enrollments in higher education during the 80's, but the drop is sharper in New York than in the nation. This should be a particular concern in a state that has done so much to provide opportunities for higher education for all.

At the graduate and professional school level, some similar surprises can be found (see chart and graph on previous page).

Based on these numbers, it would seem that the future of the New York professoriat will be almost entirely white and Asian-American, as that is what is going through the graduate school route in almost all states. Given the American Council on Education's "box score" on efforts used by states to attract more minorities into higher education, New York ranks well below California in the variety of efforts used. It may be time for the state to rethink the role of higher education in maintaining the large middle class membership of virtually all ethnic groups.

Nevertheless, when one looks at the comprehensiveness of the New York State system of higher education, from SUNY and the University of the State of New York to the Regents Degree Programs, CUNY, the state's community colleges and technical programs, there is no doubt that the *resources* are present. The real question may be—why aren't more minorities making use of them?

As the state reviews its entire educational investment "portfolio," from kindergarten to graduate school, there will need to be a serious effort to target resources to gain maximum improvement in the entire system. It seems obvious to this observer that increasing the ability of the state to retain a far higher percent of its youth through the high school diploma would be a compelling case, even in terms of financial return on the investment.

GENERAL CONCLUSIONS

In general, New York State is a good example of a diversified economy for a diversified population, and the future of the New York economy, being heavy in the high end of the rapidly evolving service economy, looks optimistic. Minority middle classes can be found in many places in the state, which has relied heavily on education as a policy tool to increase the potential of its human resources. Just as the "middle" of the income scale has been declining nationally, so the educational system, by having such a high number of high school dropouts and an excellent record of access to higher education, may be inadvertently contributing to an increase in the low end and a corresponding increase in the high end of the income levels in the state—clearly not in the state's long term interests. (New York City is already known as a place where rich and poor people live, and other parts of the state could go in the same direction.)

Minority populations are an increasing percentage of the state's youth, as Anglo populations continue to decline, due to low birth rates and outmigration. Total school enrollments have dropped from 3.5 million in 1970 to 2.6 million in 1985–86, and most of this drop has been Anglo. There are three New Yorks: (1) The City (very diverse in every way); (2) Upstate (not as diverse as The City, but basically very urban); and (3) Everything Else (mostly upstate small town and rural populations). There is much stability in New York—divorce and crime rates are quite low—but this stability could be threatened if the State begins to become a state for the rich and the poor. The following recommendations may be useful in thinking about the state's future:

1. A major effort needs to be made to improve retention to high school graduation. Unlike California, which is afflicted with some of the largest classes in this nation, the population decline in New York has kept class sizes small, and class size is a critical factor in increasing retention. Other social services and organizations that work with youth need to be made a part of the team. There is no doubt that New York *could* have the same high retention rate as Minnesota (remember that in 1900 only *10%* of youth graduated from high school and that was considered "normal"), but New York's diversity makes the challenge much more complex. Leadership from the Governor and Legislature on this issue would be a welcome beginning.

2. An increased number of youth in the State will be poor, will not speak English, and will have physical and emotional handicaps. This means that the State will have to exert more effort just to stay in place in terms of its public schools. Unlike many other states, New York did not have to engage in a crash program to raise standards for a high school diploma. Those states can anticipate a big drop in retention rates. New York has consistently maintained academic standards, and in this case, should see no decline in retention for that reason. However, more challenging children will be coming into the system in the years to come, and that could lower retention rates if concerted action is delayed.

3. Access to college continues to run at a high level in New York, but seems mixed for minorities—gains in most cases, however, not for blacks in four-year programs. New York looks good *nationally*, however, on minority access. At the upper reaches of the system, in graduate and professional schools, only Asian-Americans are showing significant gains. The number of minorities who transfer into four year programs from community colleges is not improving, even though this factor has been a key strategy in open access. Community colleges like LaGuardia have made major efforts in this area, and when minorities *do* transfer to four year programs they do well. But not enough of them are making the change. New York's universities and colleges need to see this issue as vital to their own self-interest (more students in an era of youth decline) as well as the State's.

4. The fastest growing part of New York's population is people *over 85*. The state is very heavy in people aged 24–40—the Baby Boomer group, of whom more than 20% can be called "Yuppies." Because there are so few youth, there is a real conflict possible between the forces of young and old, with Yuppies asked to decide who should get the limited resources. Baby Boomers have not, since their 18th birthday, been known for their social concerns. If this conflict were to develop, the forces interested in retirement benefits, medical care and housing for older persons, etc., have a built in advantage, as youth don't vote. Although it may be a decade or more before these conflicts surface, they could be severe in New York. It seems important that education at all levels be seen as a *civic* responsibility, not just a parental one. By 1997, the oldest Baby Boomers will be 51 years old, and will probably be seeking their own self-interest. They have had precious few children so far, and will not be overly interested in youth issues. Groups like the Association for Generational Equity are being formed to reduce these conflicts, but New York could have some major problems in meeting generational needs.

5. An increasing number of children will be born "at risk" in New York. Virtually every urban area in New York is "at risk," as jobs are now following bedrooms in moving to the suburbs. As a result, urban economies will be severely limited even as the number of urban "at risk" children increases. In addition, the lower level jobs of the service economy—fast food counters, clerks, cashiers, hotel maids, janitors—will continue to concentrate in the core cities, bringing wage levels down even further. The most vulnerable children will increasingly be located in the most economically vulnerable parts of New York. Although tax equalization plans have not generally been successful, the state may want to consider some new strategies that will provide more equity in the investment made in every child.

6. The State also will face an increasing number of

children in the first four years of life who, because of working single parents, out of wedlock births and similar factors, will be in need of positive educational experiences in these years. Although the State has done well in this area before, the pressure for pre-school and school-age day care may obscure the urgent need for Head Start-type programs that provide vital *educational* experiences for young children. These "investments" in young children will have proved themselves when the retention rate to high school graduation goes up 14 years later. (One can only hope that politicians will wait that long for educational changes to "show positive.") A hopeful sign is the large increase in state funding for public schools in 1987–88, up $653 million.

7. Although New York has led in many areas of intersector collaboration, it is time to reassess the particular ways in which higher education and schools, both public and independent, can work together more effectively. Running these activities *only* through the schools of education is to leave arts and sciences entirely out of discussions about the schools, even though arts and sciences faculty teach most of the courses in schools of education on "The Teaching of English," etc.

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NEW YORK—
SUMMARY OF MAJOR POINTS

1. New York is a very *urban* state—90% live in the state's 12 metro areas.
2. Almost all the metro areas in the State have a common trend—a major decline in core city populations caused by a movement to the suburbs, not just of bedrooms but now of jobs as well.
3. New York's economy has proven to be very well diversified, with particular strengths in the high end of the service economy, such as financial and technical services.
4. New York is the quintessential Baby Boom state, with a very small youth population (from 1970 to 1980, the state's total population declined 4%, while school populations declined *21.8%*) and a comparatively small but rapidly growing population over 65. The Baby Boomers, now age 23 to 41, may have to vote on some tough "triage" issues—resources for youth, for elderly, or for Baby Boomers preparing for retirement. Intergenerational conflicts could become a major problem in New York in about a decade.
5. The State is very high in college graduates, and *also* high in adults without a high school diploma. As the "middle" of the job structure continues to decline, the state could become a place where rich and poor people live, but not the middle class. The educational system should operate to reduce this gap, not to increase it.
6. There is a vast difference between the chances of young people graduating from high school (very low) and the chances that high school graduates will be able to attend college (very high). The justifiable pride with which New Yorkers view their system of public and independent higher education needs to be altered to get a new view of the entire educational system, kindergarten through graduate school.
7. Although minority middle-class populations are a New York tradition, minority college-going rates are mixed-mostly increases, however. Asian-Americans are increasingly represented at the upper end of the range. College teachers of tomorrow in New York will be even more white and Asian, and even less Hispanic and black.
8. The State is still completing its majority role in the immigration wave of the 1920's from Europe, while it is also heavily involved in today's 14 million immigrants, 83% of whom are from South America and Asia, even though the Statue of Liberty still beckons toward Europe. The new immigrants represent an even more complex array of cultures and languages than did the 1920's, which brought in a younger version of what was already here. Today is *not* "the twenties all over again."
9. The parts of the New York educational system do not mesh as well as they might. The Regential tradition of keeping politics separate from educational policymaking seems to be in some decline. New Yorkers are used to getting quality services for their high taxes, and it may be time to look strategically at how the investment in education could yield a greater return. Two weak points are retention levels to high school graduation, and early childhood programs.

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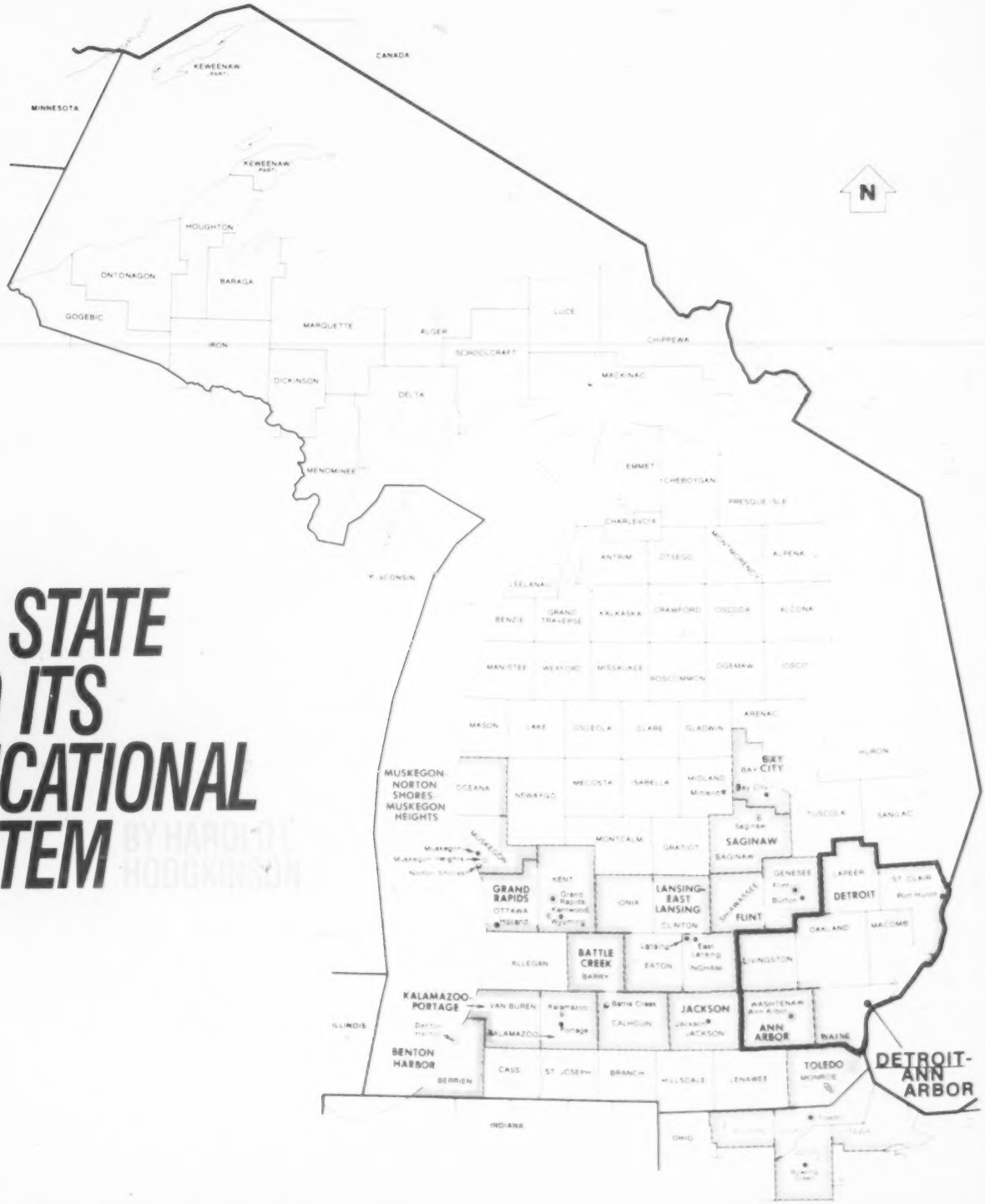
MICHIGAN:



THE STATE AND ITS EDUCATIONAL SYSTEM

BY HAROLD J. HODGKINSON

THE INSTITUTE FOR EDUCATIONAL LEADERSHIP, INC.

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The report brings together a wide variety of materials having to do with Michigan. This integration could not have been accomplished without a computer program called Super-File, which has been a joy to use. The author's gratitude goes to FYI, Inc. and the geniuses who made it possible.

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Errors of fact and interpretation, however, remain the responsibility of the author.

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COVER NOTE:

This unusual map of Michigan shows how the state looks demographically. The thick lines indicate metro areas (where 83% of Michigan people live), the darkest lines surround the Detroit–Ann Arbor Consolidated Metro area. All of the metro areas are in the southern third of the state. In thinking about Michigan's future, these areas are the equivalents of mountains, rivers and roads on conventional maps. "People Maps" like this one are becoming increasingly important tools for politicians and marketers of products and services—even to educators!

MICHIGAN:
THE STATE AND ITS EDUCATIONAL SYSTEM

HAROLD L. HODGKINSON
Senior Fellow, ACE

MICHIGAN: THE STATE AND ITS EDUCATIONAL SYSTEM

If you were to ask 1,000 Americans to free associate with the word "Michigan," a majority would probably include the words *car* and *Rust Bowl*. It was not long ago that people professed belief in a white hat view of a "Sun Belt" and a black hat area called the "Frost Belt." Houston was seen in the futurist literature as the City of Tomorrow, while Detroit was rusted metal and the ringing phrase, "Will the last person out of Detroit please turn out the lights?"

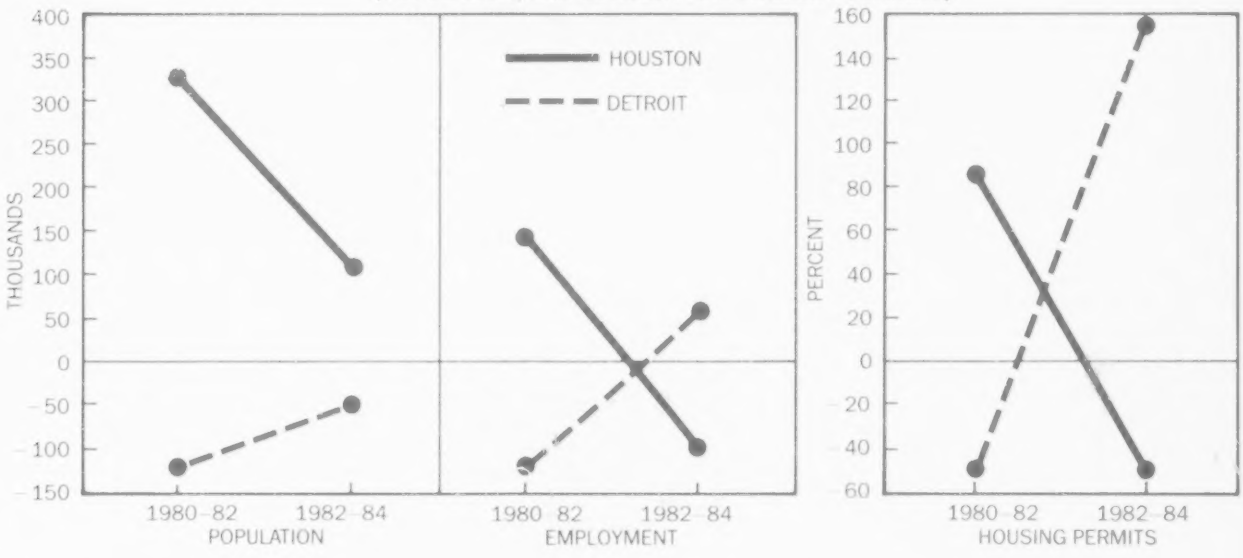
It is interesting to watch what happened to our White Hat and Black Hat cities since books like *Megatrends* hit the best seller lists.

In addition to the private housing data presented below, Detroit had *four* times as many industrial building approvals as Houston in 1984. About a third of the new jobs generated in Detroit were in manufacturing. During the 1970's, when many industrial states were losing population, Michigan gained 4% during the decade. Clearly, it is premature to describe Michigan as down for the count. During the first half of the 1980's the state has made some heroic and effective efforts to develop a new self-sufficiency based on a more diversified economy.

And in 1987, Michigan is seen as a state which will have inmigration during the last half of the decade, partly because its economy is beginning to look better in comparison with other states. For example, in 1986, more people moved from Texas *to* Michigan than moved from Michigan to Texas! Texas is still "throwing" people toward California, but it is now sending slightly more people East than West. The reversal of this historic movement of Americans to the South and West is still in flux, but could mean some big changes for regional developments in the future.

In addition, the "subcontractor states" to the Michigan auto industry (Ohio and Indiana particularly) have also seen some recent improvements in their economies through diversification. (Akron, for example, seems to be moving ahead, even though it no longer makes tires for passenger cars, one of its former economic mainstays.) Let's look at the state along some general demographic lines first:

HOUSTON vs. DETROIT
(POPULATION, EMPLOYMENT AND HOUSING PERMITS)



MICHIGAN PROFILE

1980 population	8th	9,262,000
1986 population	*	9,115,999
Black population	9th	1,199,000
Percent black	15th	12.9%
Hispanic Population	10th	162,000
Percent Hispanic	25th	1.8%
Asian Americans	*	56,800
Percent Asian American	*	0.6%
Foreign Born	15th	4.5%
Over 65	37th	9.8%
Under 18	13th	29.7%
Median age	36th	28.8 years
Working women	35th	48.7%
College graduates	35th	14.3%
Married couple households	33rd	61 %
Median household income	8th	$19,223
Owner occupied housing	2nd	72.7%
Housing value	31st	$45,000 (1980)
Youth graduating high school	28th	77.1%
Teacher salary	3rd	$30,168 (1985-86)

*Data not available

These numbers give a picture of a big industrial state with considerable ethnic diversity. Eighty-three percent of its residents live in the state's 13 metro areas, making it the most urban state in the North Central area, with the Detroit metro area accounting for almost half of the state's population. A very small percentage of women are in the work force, meaning a high wage scale for those males lucky enough to be working. (As we shall see, the state's heartbreaking task has been the conversion of $15 an hour are welders into (at best) $6 an hour clerks.) The state is quite young, but a very high percentage of youth in the state are minority, 24% (1980) of school children compared to 18% of adults. Michigan's future will depend heavily on how well these increasing minority populations do in education and jobs. The past has shown a relatively poorly educated population making very high wages in industry. That clearly will not be the state's future, as education and *re*education become a vital part of the restoration of the state's economy.

From 1975 to 1980, the patterns of migration in the state tell a story:

MICHIGAN POPULATION MOVEMENT: 1975–1980

	All	White	Black
In:	518,044	422,122	62,237
Out:	687,176	616,053	54,406
Net:	−169,123	−193,931	+7,831

For a state as big as Michigan, these numbers are small in terms of population loss. What is more important is that they reflect a rapid change in population ethnicity. The "velocity" with which white and black rates move past each other is as formidible as two cars coming toward each other at 50 m.p.h each and therefore passing each other at 100 m.p.h. If one adds the higher black birth rate

to the migration data, it is clear that the minority percentage of the Michigan population will continue to increase for blacks, and to a considerable degree, Hispanics and Asian Americans.

The typical pattern of urban development in Michigan has been typical of the nation as a whole—increasing suburban populations and declining numbers of people living in the city limits. (Only Ann Arbor and Lansing were able to develop without reducing their core city populations.) Detroit was typical of Michigan's urban areas, and America's largest cities as well:

DETROIT URBAN DEVELOPMENT: 1970–1980

	1980	1970	Net
Detroit Metro	4,353,413	4,435,051	−1.8%
Core City	1,203,339	1,514,063	−20.5%
Suburbs	3,150,000	2,920,988	+7.8%

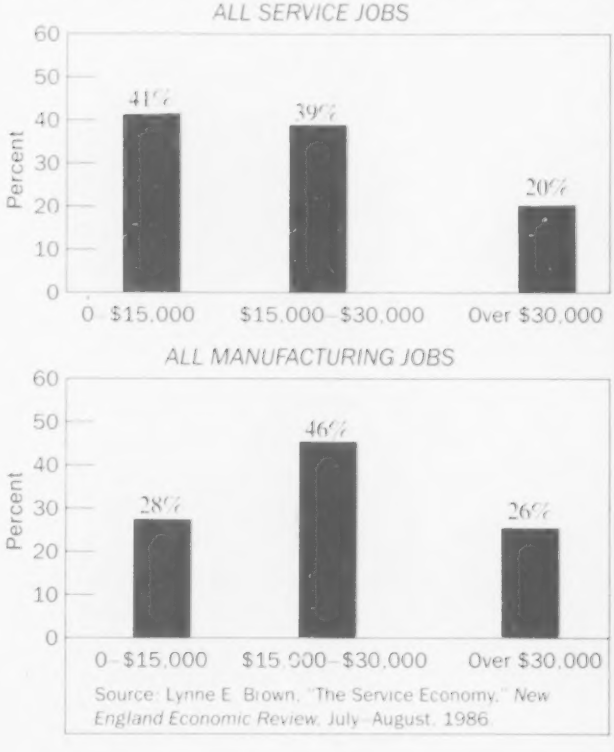
In most of the U.S., suburbanization has produced not just bedrooms in the suburbs, but *jobs* as well. That is true in Detroit but not as clearly in the rest of the State. (For many suburban Detroiters, a trip to downtown Detroit is a rare event, as the family now lives and works in the suburbs.) The consequences for municipal economic development are severe—land and materials prices in the suburban growth corridors are still lower than prices in the core cities, which is why there is such a frenzy of office building in the suburban growth corridors, with people living in buildings that closely resemble their work places. (Hopefully, new tax laws may curtail new suburban office construction to the amount for which there is a clear need. As a nation, we have overextended suburban office space about 35% beyond any currently perceived need for it.)

This discussion is important for Michigan's future, as it suggests one indicator of economic health—the evolution of new, well paying, middle-class service jobs located in suburban corridors. Although progress is being made, Michigan has a way to go before service jobs in the state are comparable in income to the manufacturing sector. For one thing, more education is needed before you can move a $15 per hour machinist into an equivalent job in computer repair—and you have to have the *job* available as well as the education! We also need to remember that, just as agriculture did not vanish when we moved into manufacturing, manufacturing will not depart because we move into services. Our *national* economy is now diversified into agriculture, manufacturing and service sectors (and a fourth sector is beginning to emerge out of the loosely defined service economy).

But manufacturing, from tennis shoes to "high tech," will retain a commitment to *jobless growth*, just as American agriculture now produces more product from fewer workers than any other agricultural system—which is part of our problem. (If American *agriculture* were ever to compete freely on international markets, a great deal of the world's farmers would be out of business, particularly Japan's rice growers and Western Europe. We grow four times as much rice per acre as the Japanese do. Overproductivity can be as much of a problem as underproductivity.)

At the present, service jobs are concentrated at the low end of the wage scale in America. Although we are the envy of the world in terms of our ability to create new jobs and our low unemployment rate, little attention has been focussed on the *nature* of those jobs or their wage levels. As can be seen from the chart below, most service jobs (especially *newly created jobs*) are at the bottom of the wage scale.

PAY LEVELS: SERVICE & MANUFACTURING



Source: Lynne E. Brown, "The Service Economy," *New England Economic Review*, July–August, 1986.

As Michigan replaces manufacturing jobs (bottom of the chart) with service jobs (top of the chart), the result will be a reduction of unemployment *and* a decrease in per capita and household income. The new riddle in America is that in 1986, 3.5 million people worked full time yet were below the federal poverty line—they would have made more if they had gone on welfare! If Michigan generates a great many of these "junk jobs" that pay wages called "chump change," then the state will *not* pull out of its economic decline, even though many more people are at work. It is now time to take a look at the Michigan economy. The following table shows (1) the percentage of the Michigan work force in each category and (2) the importance of that category to the state's economy, based on an average of 100 for all states in each category.

MICHIGAN: WORK FORCE AND INDUSTRIES

	% OF WORKERS	INDEX
AGRICULTURE, FOREST, FISH, MINING	2.1	53
CONSTRUCTION	4.1	69
MANUFACTURING	30.3	135
TRANSPORTATION, COMMUNICATION	5.7	78
RETAIL, WHOLESALE TRADES	20.1	99
FINANCE, INSURANCE, REAL ESTATE	4.9	82
BUSINESS, REPAIR, PERSONAL SERVICE	6.9	82
PROFESSIONAL SERVICE	21.5	106
PUBLIC ADMINISTRATION	4.3	81

The profile is striking in several ways. The low dependency on agriculture and mining is commendable, given the difficulties of states like Texas and Oklahoma in those areas. The high dependency on manufacturing is predictable, and the state is gradually diversifying its manufacturing base to increase its share of *nonautomotive* manufacturing, a slow but healthy trend. The construction index needs to be watched, as that is one of the better predictors of future economic activity.

The biggest surprise in the table, however, is elsewhere. We have already discussed the "junk jobs" in the service sector, but there is a growing *high* end to services as well—financial services, real estate, insurance, retail and wholesale trades, professional, electronic and technical services are all growing in jobs that pay excellent salaries. These things would normally develop along with dominance in an area like manufacturing, as they are the services needed. (Any airport will generate thousands of jobs like these.) Question: *How did Michigan become the auto capital of the world without developing its own world-class array of financial, business and technical services?* A curious thing about the development of the auto industry is the tradition of buying high end financial services from outside the state rather than "making" an investment and financial empire in Michigan that would have rivalled New York. Such a center of financial services would have diversified into many areas of economic development, and would have provided a stable source of well paying jobs even when autos were in trouble. It is worth considering why this logical development did *not* happen in Detroit, as it did to a large extent in Chicago.

In terms of *numbers* of workers, Michigan has not done badly:

MICHIGAN WORK FORCE: 1970–1983

1970	1975	1983	net
3,580,000	3,901,000	4,303,000	+10.3%

Any improvement in the Michigan economy will have to show not only new jobs created, but the average *income* level for those jobs—full-time jobs will not help if the workers are still below the poverty line at the end of the full working year. Michigan needs to focus on new areas of economic development. Recreational and tourism activities are paying off in the state in a big way, and there are some major possibilities for expansion in this area.

The major need is for the development of the top and middle of the service economy in Michigan—financial

services, electronic services, computer and information services as well as R & D. Silicon Valley, Route 128 and Research Triangle are now well established, and have contributed much to state and regional economies. Perhaps a new coalition might bring a similar center, with a different mission, to Michigan. "High tech" *manufacturing* will not do the trick, however, as most workers are paid poor salaries to compete with Japan and the Little Dragons. The biggest problem is preventing Detroit from becoming even more a city of the rich and poor, the "middles" having fled to Dearborn and Florida. Given that the Detroit metro area is about half of the state's population, what happens to Detroit will be to a large degree what happens to Michigan.

A few social indicators might be useful before we turn to the educational system itself. First, for a large industrialized state, the Michigan divorce rate is quite low—a little below the national average. There are 456 divorces for every 1,000 marriages in Michigan, against a national norm of 490 and a high of 864 divorces in Arkansas per every 1,000 marriages (in 1980). Michigan ranks fifth in the percentage of single mothers who receive welfare payments—78% do. This program seems to help mothers *and* their children toward self-sufficiency, as childhood poverty rates in Michigan (12% for 5–18 year olds) are well below the national average (17% for 5–18 year olds, 24% for all children). Abortion rates are relatively low—313 per 1,000 births, ranking 22nd. (New York is first with 666 abortions for every 1,000 live births.)

In terms of crime, Detroit ranks far ahead of Michigan in rates:

RATE CRIME PER 100,000
Michigan vs. Detroit

	Murder	Rape	Robbery
Detroit	3rd (45)	6th (112)	7th (1,121)
Michigan	17th(10)	8th (46)	7th (241)

Detroit still gets a bum rap for being the murder capital of the country, when actually it is quite far behind #2 Cleveland and #1—St. Louis. (The index we are using gives you a murder rate per 100,000 inhabitants—a far better indicator of your *chances* of getting murdered than the total number of murders would.)

What have we learned about Michigan so far? It is a very *urban* state, 80% of whose people live in its 13 metro areas. All the metros are in the southern 1/3rd of the state. About 17% of the adult population of the state is non-Anglo while 24% (1980 data) of the school children are non-Anglo. Thus, as these children grow up, Michigan will see a constant increase in the numbers of minorities assuming adult status. The white population of Michigan is aging—Livonia is a good example—and birth rates decline as a population ages. Although the educational levels of its citizens are quite low (14% of the adults possess a college degree), and only 48% of its women work compared to 68% nationally, household income in Michigan is still very high—8th in the nation. The Detroit metro dominates the state's population and is primarily responsible for the great difficulty in diversifying the state's economy, which is notably short in the well-paying sector of service jobs. As a

MICHIGAN SCHOOL ENROLLMENTS:
1970–1982:

	1970	1982	NET	U.S.
Total Students	2,181,000	1,761,000	−19.7%	−13.6%
Grades 9-12	576,000	605,000	+ 5%	−6.2%
Grades K-8	1,605,000	1,157,000	−27.9%	−16.7%

	1984-85	1985-86
Total Students	1,695,000	1,680,000
Grades 9-12	569,000	556,000
Grades K-8	1,126,000	1,124,000

result, as more people in Michigan find jobs, household income is likely to *decline* unless more well-paying service jobs can be created. (*How* jobs are created is about as well understood as a 4-year old's knowledge of how storks bring babies.) Let's turn now to look at Michigan's educational system, beginning with K-12.

MICHIGAN'S SCHOOLS:

During 1970-1980, Michigan's total population gained 4%, from 8,881,826 to 9,262,078. The public schools, however, declined by 19%. Please see chart on previous page.

As of 1985-86, decline was evident in all parts of the system, but the rate of decline had tapered off in early elementary. Declines already in the system will work their way through, but school enrollments should be much more stable in the future, in terms of enrollments in the early grades. Given a 4% growth rate in the state's population and a 20% decline in school children, one can only assume a striking decline in fertility, especially among whites.

Thus, the fact that minority students in Michigan were 24% of all students in 1980 (15% in 1970), is primarily a function *not* of increased bi[illegible]ation of fertility, but of a sharply decreased white [illegible]ity rate in Michigan. About 3% of today's students in Michigan are Hispanic, 1% each Asian and American Indian. This sharp acceleration of Michigan's minority youth populations will be very important for the state's future—because relatively few people move in and out of Michigan, the kids you have today will *inevitably* become tomorrow's Michigan adults. In addition, the velocity of the increase is quite strong, meaning that the state does not have a lot of time to get ready to make winners out of the children coming to school. Here are some interesting facts regarding Michigan's schools:

Although Michigan does well in per-student funding and teachers salaries, the percentage of children in poverty is lower than in the U.S. as a whole, meaning that fewer kids *enter* the educational system "at risk" in Michigan than in the U.S. as a whole. The handicapped and gifted numbers refer not to the number of kids in those conditions, but to the percentage of children in appropriate *programs*. Michigan can do even better in earlier identification and program placement for exceptional children.

MICHIGAN SCHOOL PROFILE

	1973–74	*1985–86*
Per pupil expenditures	$1,239	$3,789
Teachers salaries	$13,862	$30,168
Funding—federal	4.0%	4.7%
Funding—state	50%	36.6%
Funding—local	46%	58.7%

	Michigan	*U.S.*
Children in poverty	12.4%	15.3% (1980)
Children in handicapped programs	9.5%	11% (1982)
Children in gifted programs	1.3%	3.2% (1982)
Pupil-teacher ratio	21:1	18.3:1 (1985)
9th graders in 1980 graduating in 1984	77%	74%

Pupil-teacher ratios are becoming more favorable, but this is due mainly to the decrease in pupils. And the state needs to improve on its ability to retain young people to high school graduation. Other big states, like Pennsylvania and Ohio, are doing better in this important measure, while New York, California, Texas and Florida are well behind Michigan. Actually, Michigan has *improved* on retention since 1980, and is one of the few big, industrialized states to do so, but there is more catching up to do. As the percentage of "at risk" students increases, it will be harder for Michigan just to keep the retention rates it now has.

At the moment, it costs about $48,000 in 1986 dollars to get a child from kindergarten through high school. This investment will eventually be returned to the state and local coffers through taxes paid by the graduate. In Michigan, almost 1/4th of the youth today will face adult life without a high school diploma. The chances of a high school dropout getting a job with enough pay that he/she could repay the $48,000 "investment" are very small indeed. On the other hand, if our potential dropout is convinced that he/she should stay in school, and *does* graduate, Michigan should be sure that the only job available will not be a "junk job" that will pay less than welfare!

MICHIGAN HIGHER EDUCATION:

For those who *do* graduate from high school, Michigan presents a varied set of 91 institutions of higher education (as of 1983), well-balanced by public and independent status, and by level of degrees awarded. Perceived quality of higher education in Michigan would seem to be good, as only 11.5% of high school graduates go out of state for college (compared to 39% in New Jersey), and more students come *to* Michigan to be college students than leave the state to be students elsewhere. About 513,000 students participate in Michigan higher education, 287,000 full-time and 225,000 part-time. When we look at the data by institutional control, an interesting story emerges:

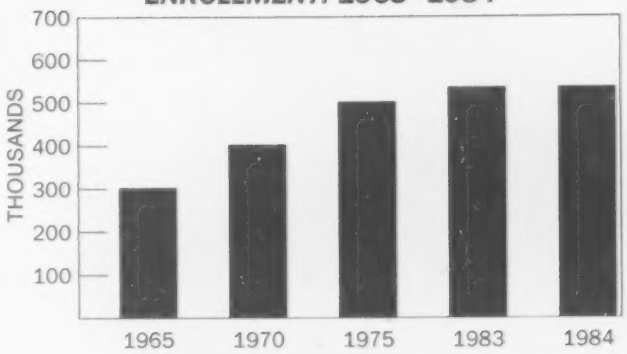
MICHIGAN ENROLLMENT BY CONTROL: 1967–1984

	1967	1984
Public enrollments	266,225 (84%)	433,134 (86%)
Private enrollments	51,241 (16%)	72,200 (14%)

Although the rapid growth in Michigan enrollments has been primarily in the public institutions, it is clear that independent institutions have actually gained in *numbers*, although they are declining as a percentage of the whole. We often make incorrect assumptions about a declining number of students in independent institutions, while they actually hold steady but drop as a percent of all students.

We can also determine *when* Michigan enrollments made their big move:

MICHIGAN HIGHER EDUCATION ENROLLMENT: 1965–1984



MICHIGAN HIGHER EDUCATION ENROLLMENT: 1965–1984

1965	270,918
1970	392,726
1975	496,405
1983	515,760
1986	505,334

We can also look at the accessibility of Michigan higher education to minority students and find some reasonably encouraging answers:

MINORITIES IN MICHIGAN HIGHER EDUCATION

1972	1980	1982
10% (28,764)	12% (34,815)	12% (34,614)

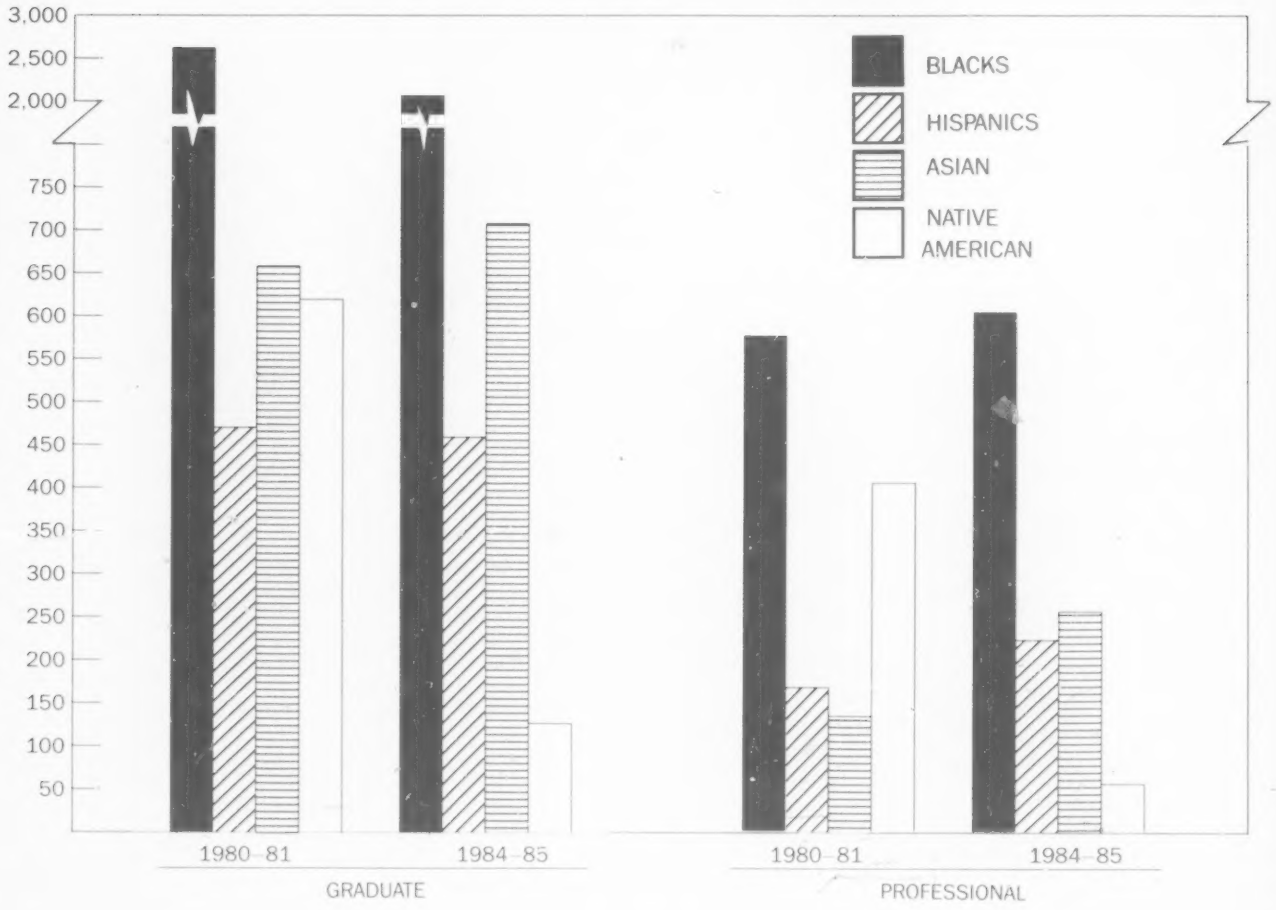
Of the 34,614 minority students in 1982, 26,680, or 9%, were black, while about 3% are other minority groups. Although this data looks promising, the situation gets more difficult as one moves up the educational ladder.

MINORITIES IN MICHIGAN ADVANCED PROGRAMS:

	GRADUATE		PROFESSIONAL	
	1980–81	1984–85	1980–81	1984–85
Blacks:	2,876	2,124 (−26%)	580	615 (+6%)
Hispanics:	484	460 (−5%)	168	231 (+37%)
Asian:	680	714 (+5%)	141	254 (+80%)
Native American:	631	145 (−77%)	411	53 (−87%)

Another way to think about this is that about 9.9% of all graduate school students in 1980-81 were minority; 8.6% in 1984-85. It is also clear that Asian American students are moving ahead more than their numbers in the total Michigan population would suggest. This seems to be true in California and Texas as well—Asians "level up" by attending the highest level of program to which they have been admitted, something which black and Hispanic students do not always do.

MINORITIES IN MICHIGAN ADVANCED PROGRAMS



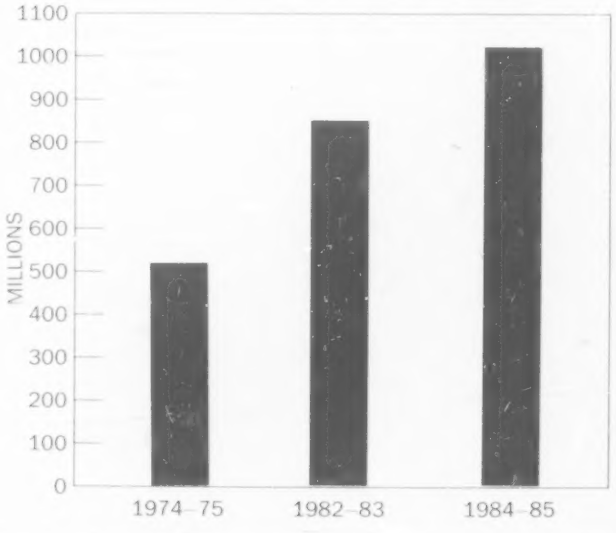
The state has worked hard on its higher education system. State tax dollars for higher education have increased substantially over the years:

1974-75	1982-83	1984-85
$524,173,000	$865,000,000	$1,005,862,000

In terms of tax effort for higher education, using 100 for the U.S. average, Michigan ends up with a high rank of 116. Only 7 states do better. (New York has a 171 index and leads the country.)

One problem to keep an eye on is the high percentage of tenured faculty in Michigan's public institutions of higher education. With 63% tenured in the U.S., Michigan stands at 70%. (Independent institutions in Michigan are only 48% tenured, about at the national average for independents.) The state will need flexibility in planning the future of its higher education system, and this will mean some new majors, courses, areas of research, etc. It is not likely that these needs can be met by retraining existing faculty. There needs to be the flexibility of new faculty lines which a 70% tenured faculty will make very difficult in the future.

HIGHER EDUCATION SPENDING



GENERAL CONCLUSIONS

Michigan has been through a period of extreme threat to its economy. Because of its unique dependence on auto manufacturing, the "turn-around" has been slow, partially because the new jobs in the Michigan economy have been heavily in the low end of the service economy. The pain of converting the $15 per hour arc welder to the $5.00 per hour clerk is not over yet. However, one of the greatest pluses to Michigan's future is that the educational system has not degenerated during this perilous period; in some ways, public schools and higher education both have developed some new strengths during this period of economic crisis. The state's commitment to education as the key path out of the economic quagmire has been strengthened. However, some issues emerge as crucial to the next decade for Michigan:

1. If Michigan education (kindergarten through graduate school) is to prepare the state's future work force, *what kind of work will there be for them to perform?* At the moment, the economist's crystal ball is not revealing much about the new jobs which will come on stream and diversify the economy. Nationally, we know that *for every new job we create for a computer programmer, we create 22 new jobs for cashiers*. How long will this continue? When will we be able to generate middle-class jobs in the service sector? Through what mechanisms? The jury is still out, although it is clear that "high tech" *manufacturing* is engaged in a policy of jobless growth, and that only about 5% of the jobs in this area require "high tech" skills. So how do the state's educational leaders decide on the kind of jobs they will train people for, when the jobs do not exist at present? Clearly, this set of issues will require that the leadership of public schools, higher education, business and government gets together and try to bring about the job structure for Michigan that they desire. The schools and colleges have performed an excellent holding action for the last decade. Now the state must develop a gyroscope that will guide the economy in a certain direction—diversification with a focus on the high end of the service economy. The Michigan educational system will have to follow that lead.

2. Although the totals are not as great as many other industrialized states, Michigan does represent a major shift in its adult demography during the next 20 years, as today's elementary school students become the next century's adults. The percentage of blacks in the state will continue to increase, due to declining white fertility. Both Asian and Hispanic citizens of Michigan are expected to increase rapidly in the next decade. Although there are some outstanding exceptions, the black middle class is not as well represented in Michigan as is the case in Ohio or New York. How can Michigan move to ensure that the black, Hispanic and Asian middle classes continue their development? What is the role of the educational system in bringing this about? How can corporations contribute?

3. Looking at the educational landscape in Michigan, one is struck by the high level of effort, energy and support, yet the low rate of high school graduations. Why is it that Ohio and Pennsylvania, two states very similar to Michigan, do so much better on retention to high school graduation? It may be that Michigan's focus (in planning for the biggest bang for the buck) may need supplementation with an additional pledge—*to make sure that every child is working at grade level*. It may be that early childhood is the key age level to make improvements. Head Start has many interesting areas for discussion, but—it works. Michigan needs to look carefully at the relatively small number of intervention points to see where major returns on small investments can be realized. My bet is that early childhood programs would be one of these targets of opportunity for Michigan.

4. The state needs some kind of coordinating mechanism that would ensure that the business, higher education and public school contingents were in touch with one another, and are planning a coherent strategy that could be mutually beneficial to all concerned.

5. It would not be unusual for those responsible for higher education policy in the state to begin saying that quality must be maintained, even at the price of equity. These views represent a vast misperception of the situation. No one would argue a reduction in the quality of the B.A.—the point is a different one. As the number of children born in poverty increases in Michigan, as the number of children who enter public school "at risk" gets larger, the function of education begins to change, from *picking winners* to *creating winners*, a much more difficult task. As the number of youth in Michigan continues to shorten, it becomes more vital than ever that every young person in the State develop to their maximum potential. This is not rhetoric—every resource of the state should be bent on the task of carrying out this challenge.

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MICHIGAN—SUMMARY OF MAJOR POINTS

1. Michigan is a very big, very urban state with a young minority population which will continue to increase its share of the adult population, as the white birth rate continues to fall. Although minority middle classes are alive and well in Michigan, they are not as stable as is the case in many other states.
2. As the Michigan economy has reeled from one crisis after another in the auto industry, it is very fortunate indeed that the schools and colleges in Michigan have not been decimated during the last decade. However, in the past, many assembly workers were living upper-middle class lives *without* any advanced education. That day is gone, probably forever.
3. Although new jobs have been added to the Michigan work force, a very large number of them have been low-paying, service sector jobs that require very little education. Our economy seems to have an infinite capacity to create these "junk jobs"—for every new job for a computer programmer, we create 22 new jobs for cashiers. Junk jobs are alive and well in Michigan.
4. Michigan is a high tax effort state—people are willing to pay heavy taxes in return for excellent services. In the future, the nature and benefits of these services will have to be specified even more clearly if the aging white population is to support new programs for improving the educational achievement of minorities as well as younger whites.
5. The higher education system in Michigan represents a major investment of public and private dollars, and seems to be very effective in meeting the needs of citizens. The independent sector of higher education is also sophisticated and of high quality. However, the need for some additional coordination of the various educational levels within Michigan still exists, particularly in the necessity of developing a strategic educational plan for *all* levels of education in Michigan, including the very sophisticated education and training activities of Michigan's corporations and businesses.
6. Additional attention needs to be focussed on the small number of places in the educational system where a major "bang" can be had for a small "buck"—obvious candidates would include Head Start-type programs for early childhood, careful focus on the first years of elementary school, increasing retention to high school graduation and increasing the number of college-eligible high school graduates who actually do go on to college.

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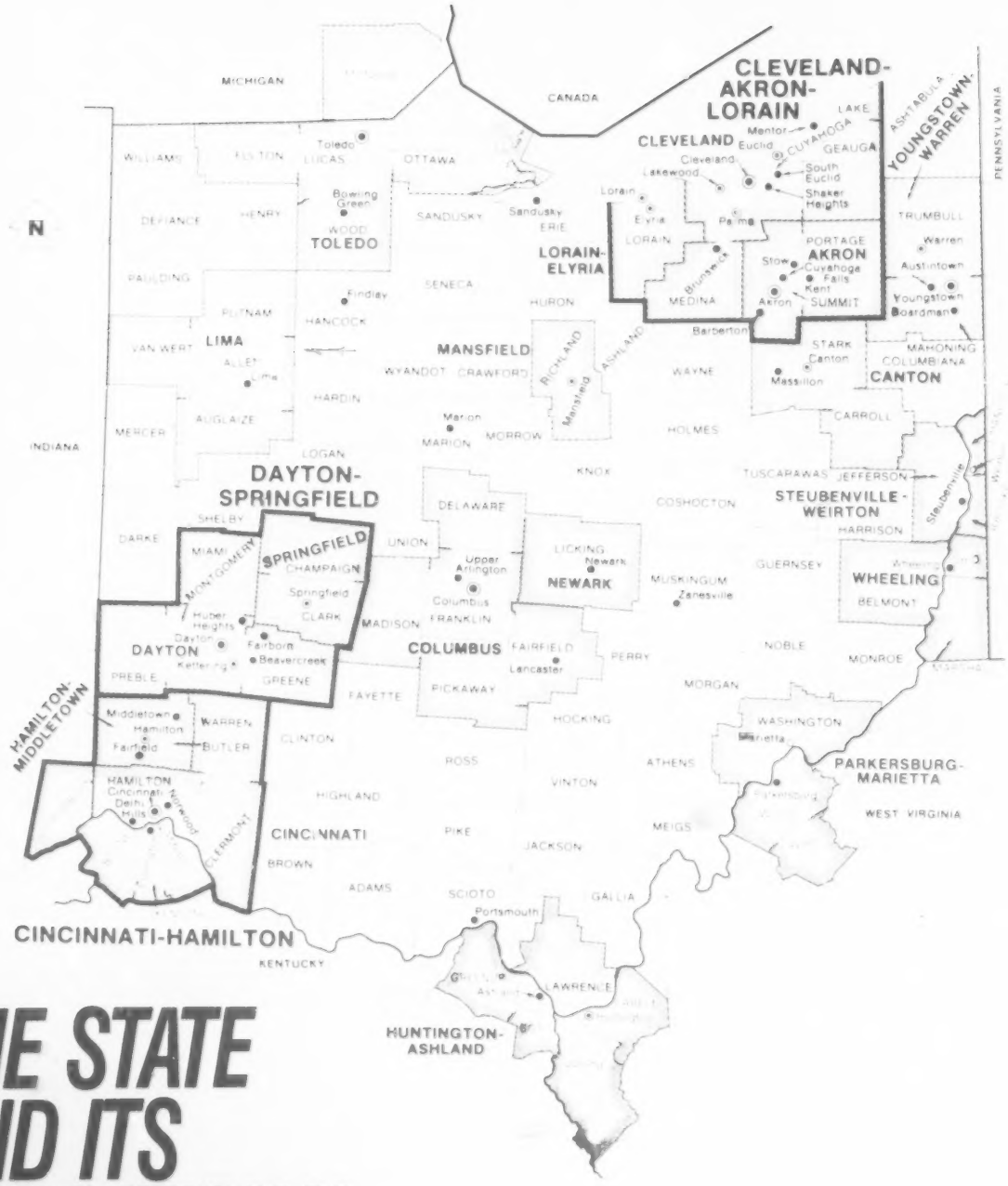
OHIO



THE STATE AND ITS EDUCATIONAL SYSTEM

THE INSTITUTE FOR EDUCATIONAL LEADERSHIP, INC

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Errors of fact and interpretation, however, remain the responsibility of the author.

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COVER NOTE:

This unusual map of Ohio shows how the state looks demographically. The thick lines indicate metro areas (where 86% of Ohio people live). In thinking about Ohio's future, these areas are the equivalents of mountains, rivers and roads on conventional maps. "People Maps" like this one are becoming increasingly important tools for politicians and marketers of products and services—even to educators!

OHIO:
THE STATE AND ITS EDUCATIONAL SYSTEM

HAROLD L. HODGKINSON
Senior Fellow, ACE

OHIO: THE STATE AND ITS EDUCATIONAL SYSTEM

Like several other Midwestern states, Ohio is much more complex than first appearances would suggest. The state has 17 metropolitan areas, more than any other North Central state. Eighty percent of Ohio's citizens live in these metro areas, making Ohio very urban. On the other hand, there are some areas in Ohio with rather low population densities. It is both *very* urban and *very* rural. In addition, like Indiana, Ohio is both a Great Lakes and Great Plains state. It combines the manufacturing tradition of Michigan with the traditional family values of the "heartland" states of the Midwest. Even more important is the Appalachian tradition in Southeastern Ohio. (One look at the cover map of Ohio will show the major characteristic of Appalachian states—metro areas that are shared with neighboring states. These shared metros are mainly in Southeastern Ohio).

When Toqueville wrote about America in the 1830's, he visited Ohio which was, in many ways, the "frontier." He described a group of exceedingly individualistic people, all seeking their personal destinies with little regard for state concerns—somewhat the way some see Californians today, and for similar reasons. There has been a nonconformist feeling in much of Ohio's past, leading to the formation of both Antioch and Oberlin Colleges—now very different, but both stemming from a commitment to individualism and to service through individual efforts. Thus, Antioch's devotion to work-study programs, and Oberlin's earlier devotion to sending activist missionaries around the world.

The many "firsts" in Ohio education support this notion. Both the first kindergarten and the first junior high were located in the Columbus, Ohio area. And McGuffy was a Professor at Miami University of Ohio when he wrote the incomparable Readers that still bear his name. Not only was Ohio the first state designated in the Northwest Territory (and Ohio University in Athens, Ohio, the first university), but also Ohio State University was the (chronologically) first of the Land Grant universities chartered under the Morrell Act. Back in 1868, the first professional baseball team was founded in Ohio—the Cincinnati Reds. Continuing the tradition, it was not unexpected that the first man to set foot on the moon was an Ohioan named Neil Armstrong, based on an earlier orbital flight by another Ohioan named John Glenn, and still earlier flights (1903) by two Buckeye brothers named Wilbur and Orville Wright.

Throughout most of its history, Ohio has been a rather middle-class state—economically well-off farmers and rather well-off factory workers. Per capita income was high, tax rates were low. In recent years, however, Ohio's manufacturing sector, much of it subcontracting for Detroit, has been put through a major wringer with increased unemployment and lower personal income levels. By about 1985, some indicators were turning around, indicating that the major job of downsizing industry, converting manufacturing workers to other tasks, and developing a service base for the economy were beginning to work. The state still has some hardship to bear, but Cleveland is now lively, energetic and the home of the Rock Music Hall of Fame as well as a world class symphony orchestra; while Akron has achieved economic parity by rebuilding with new businesses, even though the city now makes no passenger car tires, which was its former mainstay. As we will see, one major problem confronting Ohio is the development of a strong set of service corporations and businesses with a large number of *middle-income* jobs, essential for the state's economic diversification.

It should be worth pointing out that the American population is not distributed evenly by state. In fact, these ten states have *half* of the U.S. population: California, New York, Texas, Illinois, Pennsylvania, Ohio, Florida, Michigan, New Jersey and Massachusetts. In this sense, Ohio is a part of a bigger "Big Ten" than the football conference!

At this stage, let us look at a general picture of Ohio before going into more specialized areas:

OHIO PROFILE

1980 Population	6th	10,797,000
1985 Population	7th	10,744,000
1980 Black Population	10th	1,076,000
Percent Black	19th	10%
1987 Black Population	*	990,000
1980 Hispanic Population	15th	119,000
Percent Hispanic	34th	1.1%
1980 Asian Population	39th	47,820
Percent Asian	*	0.4%
1980 Foreign Born	27th	2.8%
1980 Population over 65	29th	10.8%
1987 Population over 65	*	12.4%
1980 Population under 18	23rd	28.7%
1987 Population under 18	*	26.7%
1980 Median Age	20th	29.9 years
1987 Median Age	*	32.2 years
1980 Working Women	37th	48 %
1980 College Graduates	40th	13.7%
1985 Personal Income	25th	$13,228

*Data not available

From these numbers we can paint a picture of a very large state with a large but slightly declining black population and a small but increasing Hispanic population (the amount of increase is not certain at present). The state is aging rapidly, with more older and fewer younger persons. The social traditions of the state assumed single wage-earners, usually male, while women kept house. In the past, with active unions and high wages, the state's household income was high. Today, it is very difficult to live a middle class existence without two earners in a household. Related to this issue is the fact that Ohio is high on secondary graduates and low on college graduates.

Although sources differ, Ohio has clearly lost ground since 1970, both in terms of deceased income and increased unemployment. The good news is that the unemployment rate has gone from 12.5 percent in 1982 to 8.1 percent in 1986. The bad news is that this improvement in *percentage* was accomplished while moving from 640,000 to 426,000 unemployed in 1986, still a very large number of *persons*. However, the numbers mask a decline of 11.2% in well-paying manufacturing jobs, not made up by the increase in low-paying service jobs. In addition, nonwhite men had a much higher unemployment rate than other groups. To get a better sense of these issues, let's take a look at the various components of the Ohio economy. The first column gives the percentage of workers engaged in that area, the second compares the number of jobs in that sector to the nation's workforce, with 100 being the baseline for the U.S. as a whole.

OHIO WORK FORCE AND INDUSTRIES, 1980*

	% OF WORKERS	INDEX
AGRICULTURE, FORESTRY, MINING, FISHING	2.5%	63
CONSTRUCTION	4.6%	78
MANUFACTURING	30. %	134
TRANSPORTATION	6.6%	90
RETAIL, WHOLESALE TRADE	20.4%	100
FINANCE, INSURANCE, REAL ESTATE	5. %	83
BUSINESS, REPAIR, PERSONAL SERVICE	7. %	83
PROFESSIONAL SERVICE	19.7%	97
PUBLIC ADMINISTRATION	3.9%	74

*1986 data indicates similar proportions, except for manufacturing jobs, which have declined.

There are some encouraging things about this profile. First, the low index for agriculture is not bad, considering the difficulty agriculture is in today. Also, although the dependency on manufacturing is high (Michigan's index is 134), Ohio has more "arrows in its quiver" than does Michigan. One major problem is in construction, an area very predictive of *future* economic growth. In 1985, with a 7.9 percent unemployment rate for the state, *21.9 percent* of construction workers were out of work, even though the state had very creatively worked to create new construction jobs. It is hard to imagine a state with an expanding economy *and* decreased construction.

The state's dependence on manufacturing is slowly declining. A large number of manufacturing workers have already been retrained through the state's excellent vocational education programs. More progress has been made in this area than in the equally important task—*creating a large number of well-paying jobs in the service sector.* The areas with the best potential for this are finance, insurance, real estate and business services (relatively undeveloped in Ohio); and second, public administration, especially state government. These two sectors had the lowest unemployment rates in 1985, and the first area remains a major source for new well-paying jobs in the expanding service sector of the U.S. economy as well as Ohio's. *Diversification* of economic resources is the name of the game in the next decade, especially into the high end of the service economy which has both stability and growth potential. Compared to other states, Ohio has made real strides in entrepreneurship instruction in Ohio's vocational education curriculum at high school, collegiate and adult education levels. In the areas of job placement, accountability, job creation and development, these efforts promise significant gains in the future.

Several Ohio publications emphasize the number of new jobs created rather than the *income levels* of those new jobs. In the U.S. today, 3.5 million people work full time, yet are eligible for Federal poverty programs. The "declining middle" of our economy is now well documented, stemming from the fact that in 1986, 41 percent

WHO DOES WHAT IN OHIO?
(4,555,200 Total Workers In 1986)

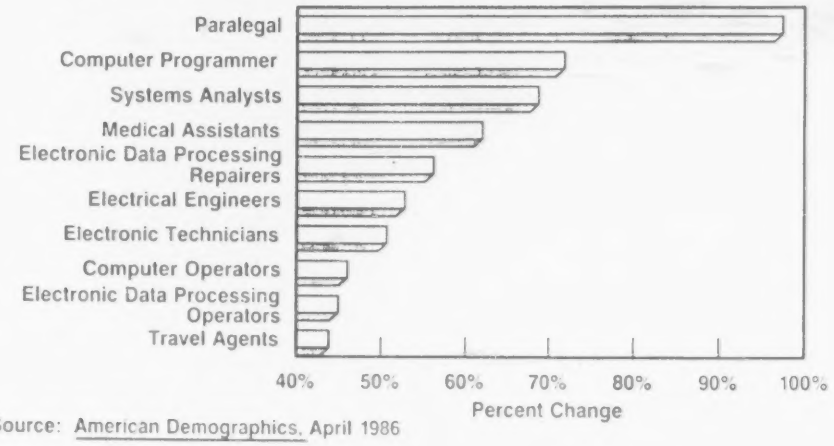
Doctors	18,200
Dentists	5,300
Lawyers	19,000
Computer programmers	13,000
Mathematicians	200
Secretaries	181,400
Fast food	220,200
Janitors, maids	132,600
Laborers	222,500

of all service jobs paid less than $15,000. Barry Bluestone stated in May, 1987 that two-fifths of all *new* jobs in the U.S. paid less than $7,400 in 1986 dollars. Although some of these are part-time jobs, the decline in pay is very real for the new jobs in low-level services. This needs to be carefully monitored in Ohio, given the current job force.

Much attention is given in Ohio (and other states) to the future of computer programmers in the workforce, but there are 17 fast food workers in Ohio for every computer programmer! It is easy to get foxed by the numbers on *percentage* growth of an occupation compared to the *number* of new jobs created. Look at the U.S. projections for 1985-1995:

FASTEST GROWING JOBS IN TECHNICAL AREAS

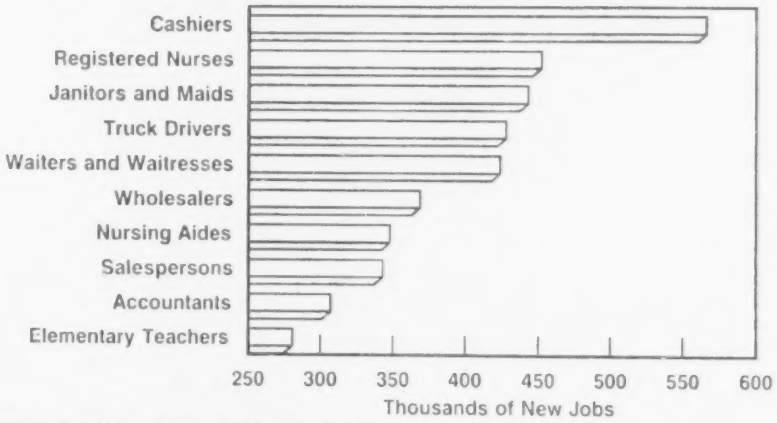
(Fastest Relative Growth, 1985 to 1995)



Source: American Demographics, April 1986

MOST NEW JOBS IN TRADITIONAL OCCUPATIONS

(Fastest Absolute Growth, 1985 to 1995)



Source: American Demographics, April 1986

For Ohio to move ahead, the state will need *new jobs that pay well*. Fortune Five Hundred companies do not generate most new jobs. The largest number (and percentage) come from recently established small businesses—we start about 600,000 new ones each year. Ohio needs to start more new small businesses and help them along. For example, the National Center for Research in Vocational Education has stated that between 1980 and 1982, small companies created 2,650,000 new jobs while large companies *lost* 1,664,000 jobs. This makes at least as much sense as "smokestack-chasing" existing manufacturing concerns to get them to relocate in your neighborhood.

As we think about equity in Ohio, one yardstick is the number of minorities who have moved to suburban residences (called metros) from the city itself. As of 1980, Ohio looked like this:

BLACK SUBURBAN POPULATION: 1980

	City	Metro Area
Cleveland	573,000	1,898,000
Black Population	251,000	345,500
Columbus	564,000	1,243,800
Black Population	124,000	136,900
Cincinnati	385,000	1,401,400
Black Population	130,400	173,300
Toledo	354,600	1,015,400
Black Population	61,800	103,500
Dayton	203,000	942,000
Black Population	73,080	113,040

This means that 94,500 Cleveland blacks live in the suburbs, 12,900 in Columbus, 43,000 in Cincinnati, 41,700 in Toledo and 40,040 in Dayton, or 232,100 for the state total of black suburbanites in these major cities.

Another equity indicator is *income* levels. The Joint Center for Political Studies has ranked American metro areas as follows by black *income* levels in 1986:

METROPOLITAN AREAS RANKED BY BLACK INCOME LEVELS:

1. Nassau-Suffolk, NY
2. Miami, FL
3. Columbia, SC
4. Richmond, VA
5. Newport News-Hampton, VA
6. Columbus, OH
7. Los Angeles-Long Beach, CA
8. Dayton-Springfield, OH
9. San Diego, CA
10. Gary-Hammond, IN
11. Indianapolis, IN
12. Charleston, SC

Ohio has two metros in the top eight—an excellent record. Columbus does well because blacks do not need to move to the suburbs to find middle-class housing, as it still exists in the city itself. Also, the state government, located in Columbus, is a major provider of black middle-class jobs. Open college enrollment programs also have helped.

Ohio's crime rate is low for a very urban state, but not Cleveland:

1980 OHIO CRIME RATES (CRIMES PER 100,000 CITIZENS)

	Murder	Rape	Robbery
Ohio	26th (8.1)	19th (34.3)	9th (223)
Cleveland	2nd (46)	3rd (122.8)	6th (1,187)
Columbus	18th (15.3)	13th (81.8)	14th (573)

Cleveland is the only major crime city in what is a relatively safe state. However, it is clear that cities are the most dangerous places, compared to the state average! In addition, Ohio has 134 prisoners per 100,000 population, which is a lot of tax money that could have been used for education or health care, etc. Remember that it costs a state approximately $24,000 to have a prisoner in jail for one year, about $3,500 for a college student.

Ohio also has a high divorce rate, ranking 12th. There are 585 divorces for every 1,000 marriages. The consequences of this major change are vital for the state, particularly in assisting women with dependent children and no husband to gain work skills and avoid increasing the "feminization of poverty" in Ohio.

The state ranks low in venereal disease, but the *cities* are another story—Cincinnati is 6th in gonorrhea (1,750 cases per 100,000), Cleveland is 9th (1,712), Columbus is 15th (1,387) and Dayton is 20th (1,228). Not only are gonorrhea and syphilis (a much more dangerous disease) important social problems, but there is also much evidence that venereal disease is a good marker for AIDS.

Two-thirds of Ohio's citizens were born in the state which contributes to the relative stability of the population. It also means that today's Ohio kid is *very* likely to become tomorrow's Ohio *adult*. Compared with Nevada, in which 78% were born in another state, one can see the differences in planning strategy. It is even more important that Ohio educate its children, as they will become the citizens, workers and voters of that state's future. It is interesting to note that Ohio ranks 26th in voter turn-out with only 60 percent of Ohio registered voters voting in national elections.

That should be enough background on this interesting state so that we may now look at the educational system within a meaningful context.

OHIO'S EDUCATIONAL SYSTEM

From 1970 to 1982, Ohio schools lost more students than the national figures:

Ohio School Enrollments 1970-1982

	1970	1982	Net	1986-1987
Total	2,423,800	1,899,100	−23%	1,793,500
Grades 9-12th	703,400	624,700	−11%	585,400
Grades K-8th	1,720,400	1,274,400	−25.9%	1,208,100

While the nation's schools lost 13 percent, Ohio lost 23 percent, a typical pattern for the mid-Atlantic and North Central states from 1970 to 1982. However, by 1985-86, many states were reporting an increase in elementary school enrollments, which would begin to work up through the system. Declines will "bottom out" in Ohio, but this will happen later than in most neighboring states, and the upturn will be slight. However, because the decline is so heavily white, the percentage of minority students in Ohio will increase more rapidly than in previous decades. Here is how the state's schools look on a variety of indicators:

Ohio School Profile

	Date	Ranking	Percent	Amount
High School Graduation Rate	1980	18th	77.5%	
	1984	16th	80.5%	
Per Pupil Expenditure	1980	25th		$ 2,321
	1986	26th		$ 3,547
Teacher Salary	1980	26th		$16,200
	1986	23rd		$24,500
Pupil/Teacher Ratios	1982		19.7%	
	1985		18.4%	
Percent of Children In Poverty	1982		12.2%	
Percent minority	1986–87		16.2%	
Black			14.2%	
Hispanic			1.1%	
Asian			0.8%	
Percent Bilingual	1982		0.5%	

Although increases are reported for teacher salary and per pupil expenditure, Ohio's *relative* position on those indicators has not changed, as other states have increased proportionately. However, on retention, Ohio has improved its standing considerably at a time when other states have had trouble doing so. This is during a time when minority percentages have also shown some increases without lowering retention rates. One of the reasons for this good showing is a factor we have already mentioned—the (relatively) large number of minority middle-class members in Ohio. Like other large cities in the nation, Ohio's urban schools have "minority majorities" in many cases, but lots of these students are from stable homes with parents who care about them and support their school achievements. The issue is not just race, but also *class*—we have learned that middle-class minority children can perform almost identically with middle-class white children.

Only Ohio, Pennsylvania and New Jersey, of the large urban states, have done so well on retention, leaving New York, California, Texas and Florida in the bottom ten while Pennsylvania, Ohio and New Jersey rank 14th, 16th and 19th respectively.

Ohio has made improving high school retention a state priority since 1980. There is a tradition in the state (as in Pennsylvania) that one needs a high school diploma to get a good job in a factory (but not a college degree). The Ohio schools have capitalized on the work ethic that is deeply inbred in the state. In addition, retention is one major reporting category in the state's 12 indicators of progress which school districts submit to the Department of Education. The Office of Public Instruction publishes the top and bottom of the list throughout the state. Another source of the high retention level is the excellent statewide vocational education program. There are more reasons to stay in school in Ohio than to drop out, in that many potential dropouts are able to see a relationship between what they are studying and the kind of job they hope to have. As a result, many vocational education students go on to college, once they realize that they can do the work at that level. Vocational education programs are organized in 49 districts, serving every high school in the state.

Ohio has also been well ahead of the pack on developing better articulation between schools and colleges in the state. Their Commission on Articulation was appointed in 1980, as a collaborative act between the Ohio Board of Regents and the State Board of Education. (In some other states familiar to the author, these groups are just beginning to know each other's names). Their focus on curriculum articulation, student and teacher competence and assessment antedated the "reform" movement in America by several years. Also in the vanguard are the early math and English composition tests for college placement, used to improve public school performance.

In addition, a very exciting "Classrooms of the Future" project was begun in 1986 as a cooperative venture. Applying colleges and universities will be working collaboratively with school systems in their geographic areas to develop new approaches to the problems of elementary and secondary education in the future. These innovations will then be implemented and tested in prototype K-12 and vocational schools in the program.

Let's now take a look at Ohio's higher education resources which are profiled on the following page.

This profile shows a diversified set of institutions, covering all sectors of higher education. Note that although independent institutions enroll a smaller percentage of all students than previously, their actual student *numbers* have not changed greatly. As with most other states, the increase in enrollments from the "Baby Boom" was disproportionately in the public institutions, making independent campuses *appear* weak, while in fact they have been holding their own in terms of student registrations. In addition, if one wants to find increasing student diversity by age and ethnicity, one looks at the two-year institutions in Ohio. As with the nation, they have enrolled a disproportionately large share of older and minority students.

Although tax revenues for operating costs of higher education have increased (up 13% from 1983 to 1985), the state has not "gained" much in comparison with others. The very tight budget situation in 1987-88 will make major increases unlikely for either higher education or the public schools. Fortunately, both sectors are involved in many new projects anyway. In addition to those already mentioned, a number of higher education institutions in Ohio are engaged in major efforts to rethink undergraduate education, requirements for the major, and the nature of general education and the liberal arts. (More definitive assessment of teaching quality does not yet seem a major issue in Ohio higher education, but that is also true for the nation). Also needed, in the author's view, is a rethinking of the nature of higher education and the world of work, an area in which Ohio clearly has the capacity to lead the nation.

Looking at Ohio minority enrollments in a bit more detail, it seems that some major changes are taking place:

Higher Education Minority Enrollment

	Two-year		Four-year	
	1980-81	1984-85	1980-81	1984-85
Black	15,766	15,764	30,016	23,442
Hispanic	1,096	1,116	2,329	2,684
Asian	668	819	2,511	4,136
American Indian	461	508	808	769

The downturn in black four-year enrollments has been considerable, while the four-year Asian enrollment almost doubled. Other state studies support the Ohio data: Asians tend to "level up," in that they will attend the *highest* level of institution they can. If admitted to a state college or the state "flagship" university, they will unhesitatingly

Institutions of Higher Education:	**138**	**1983**	
Two-year Programs	**58**		
Bachelor's Degrees	**44**		
Graduate	**36**		
Public Institutions	**64**		
Independent Institutions	**53**		
Enrollment, All First Year Students	**88,426**	**1970**	
Enrollment, All First Year Students	**108,867**	**1984**	
Total Enrollment	**535,592**	**1983**	
Total Enrollment	**518,435**	**1984**	
Independent Enrollment	**95,727**	**1967**	**30%**
Independent Enrollment	**98,393**	**1984**	**19%**
Bachelor's Degrees Awarded	**42,937**	**1983**	
Bachelor's Degrees to Black Students	**2,057**		
Full-time Minority Enrollment	**33,695**	**1982**	
Minorities as Percentage of Full-Time Enrollment		**1982**	**11%**
Full-time Faculty	**15,680**	**1983**	
Tax Effort for Higher Education	**89**	**1982**	**(100 U.S. average)**
Tax Funds for Higher Education	**$386,017,000**	**1974-75**	
Tax Funds for Higher Education	**$846,331,000**	**1982-83**	
Tax Funds for Higher Education	**$954,860,000**	**1984-85**	

attend the flagship. The data are even more striking for graduate and professional study in Ohio:

Minority Advanced Programs Enrollment

	Graduate		*Professional*	
	1980-81	*1984-85*	*1980-81*	*1984-85*
Black	3,041	2,328	758	722
Hispanic	426	380	121	173
Asian	643	922	146	265
American Indian	109	142	42	27

As blacks decline in both graduate and professional areas, Asians are increasing in both. Remember that total enrollments in Ohio declined from 535,592 in 1983 to 518,435 in 1984. Although these numbers are a very small chunk of the approximately 518,000 students in Ohio higher education, it is a *significant* small chunk, particularly if Ohio wishes to keep its excellent record regarding the black middle-class populations, and wishes to do better regarding Hispanics and American Indians. In addition to efforts of public institutions, Ohio's independent colleges have been exceptionally serious on issues of minority populations, both studeats and faculty. One only hopes that we can learn from their experiences since the 1960's in order to do better in the 90's.

In general, Ohio has done well economically for its citizens even without a high level of tax effort. However, the manufacturing turn-around should indicate that in the future, Ohio will have to work harder just to stay even—in education, in new job creation, in citizen participation, in equity for its minority citizens. The trick is not to lower the standards, but to increase the effort.

GENERAL CONCLUSIONS

Ohio is both very large and very urban. Like other states in the Midwest, it has been undergoing a number of major changes simultaneously, including a decline in the white population and an increase in minorities, an economic system that underwent severe disruption due to the downturn in manufacturing and resulting in increased unemployment, the lack of development in the "high end" of the service economy, and some major shifts in family structure. While there is some evidence that manufacturing is again becoming viable in Ohio, partly through the retraining of workers to assume new tasks, it is also clear that the state has more to do in order to diversify its economy and further reduce unemployment, particularly in the creation of new businesses, where progress has been made.

Black populations in Ohio have done well in terms of suburban residency and middle-class income levels. The state needs to do more to ensure that middle-class minority populations continue to increase in number, particularly making sure that the state provides equitable access to the new jobs in the Ohio economy, and that a large number of these new jobs pay a reasonable wage. (Remember that last year in America, 3.5 million people worked full time, yet were eligible for federal poverty assistance). The key to this development is in new small business starts, particularly in the high end of the service sector—financial services, real estate and insurance, business services, technical services, etc.

A few of the key issues are listed below:

1. Can the state provide an educational system that will actually link students (high school and college) with jobs?
2. How can the state capitalize on its excellent rate of retention of young people to high school graduation, and work harder on the number of those who go on to college, and college graduation?
3. How can the state encourage additional small business ventures to start up in Ohio, particularly in high end services and with minority participation?
4. Given the good beginning, what else can Ohio do to encourage meaningful and useful collaboration between the public school and higher education sectors, given that they are part of one system?
5. Hundreds of major companies in Ohio have been genuinely interested in educational issues at all levels. How can these resources be brought to bear on Ohio's range of educational problems?
6. How can jobs be provided for women without increasing overall unemployment rates?

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OHIO—SUMMARY OF MAJOR POINTS

1. Ohio is a very large, very urban state, with an aging and declining white population and gradual declines in the adult black population. Its traditional family structure is beset by high divorce rates (528 divorces per 1,000 marriages), and lowered household income because women are still not in the workforce in proportionate numbers. Ohio has ranked low on "level of effort" measures, in that there is more taxable wealth than is used to provide public services.
2. Even though the manufacturing sector of the Ohio economy has been through a troubled decade, with increased unemployment, it appears that the worst is over, as unemployment rates begin to decline, and new jobs are generated. However, we need to keep a careful eye on those new jobs in terms of how much they pay, particularly in the service sector.
3. While the manufacturing shifts were taking place, the Ohio *educational* system did not show a proportional decline in quality. In fact, retention to high school graduation has even improved since 1980, and college-going rates remained roughly the same.
4. Ohio has two metros—Columbus and Dayton-Springfield—in the top ten in terms of black family income. This excellent record can be expanded and built upon in the years ahead.
5. The youth decline in Ohio is steeper than in most other states, and does not really turn around until about the year 2,000 for high school students. The next decade will reflect a steadily increasing percentage of minorities in Ohio schools, and eventually in Ohio's voters, workers, parents and college students. As youth become scarce, they become too important to be allowed to fail.
6. The future professoriate in Ohio will be heavily white and Asian, as those are the groups disproportionately represented in graduate and professional school enrollments.
7. A good agenda for Ohio would be to work on improving the high school graduation rate for blacks and Hispanics, better access for minorities to higher education, the development of new small businesses especially in the high end of the service sector, better daycare and early childhood programs as more women in Ohio enter the workforce, and increasing the graduation rates in Ohio higher education as well as further improving the articulation between the segments of the higher education system and with the public schools.

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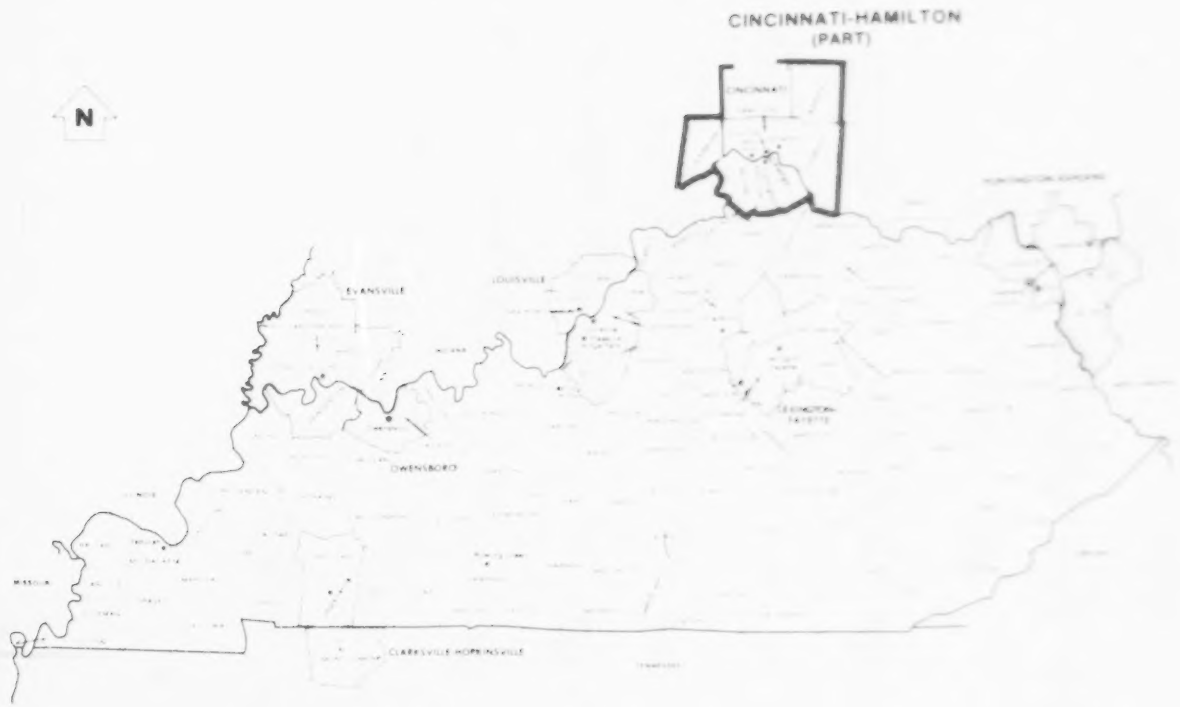
KENTUCKY:



THE STATE AND ITS EDUCATIONAL SYSTEM

BY HAROLD L. HODGKINSON

THE INSTITUTE FOR EDUCATIONAL LEADERSHIP, INC.

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Errors of fact and interpretation, however, remain the responsibility of the author.

Harold L. Hodgkinson
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COVER NOTE:

This unusual map of Kentucky shows how the state looks demographically. The thick lines indicate metro areas, where only 45 percent of Kentucky's residents live. Of the seven metro areas, five are shared with another state, a constant problem. (Eighteen percent of Cincinnati is in Kentucky!). "People maps" like this one are becoming increasingly important tools for planners, politicians and marketers—even to educators!

KENTUCKY:

THE STATE AND
ITS EDUCATIONAL SYSTEM

HAROLD L. HODGKINSON
Senior Fellow, IEL

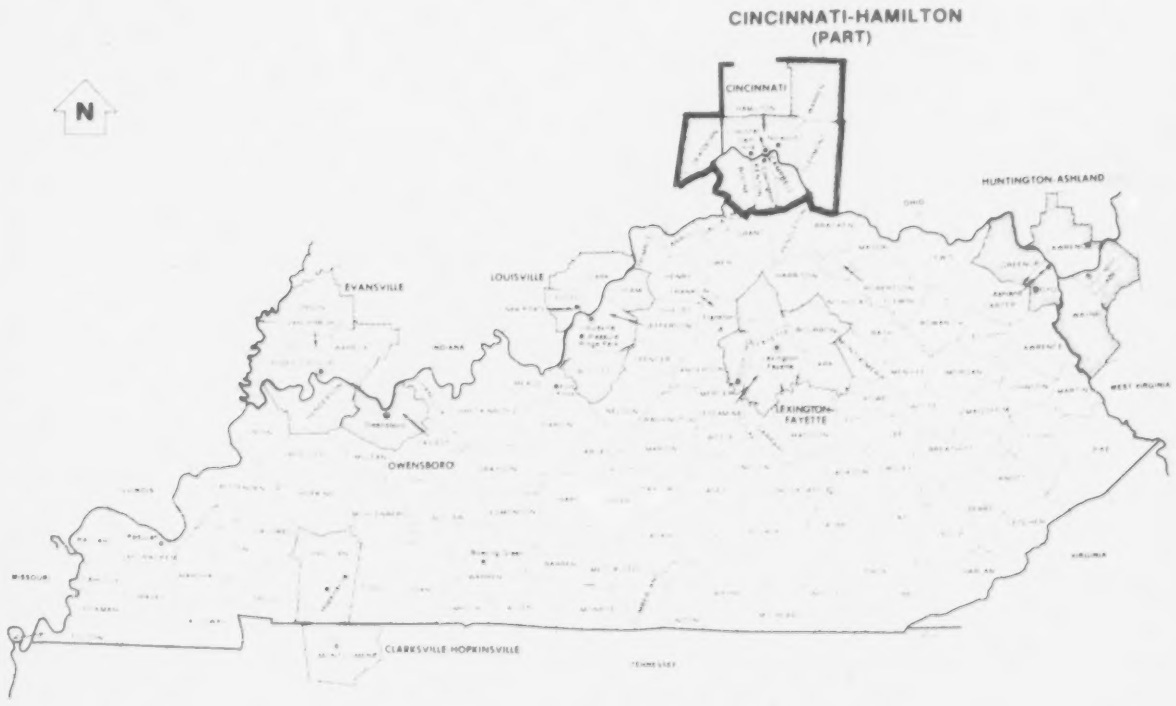
KENTUCKY—THE STATE AND ITS EDUCATIONAL SYSTEM

When we think of Kentucky, we think of race horses, bourbon, basketball, mint juleps and tobacco, and we are correct. It is a state of extreme contrasts—beautiful and ugly, rich and poor, advanced and behind. Although it is a low profile state today, it was The Golden West of earlier times. But who would think of Kentucky as having more miles of waterfront shoreline than any state except Alaska? As the state with the largest man-made lake? As the state that, through the efforts of John Filson, built up a local character named Daniel Boone into a major figure, in order to sell Kentucky real estate?

As the state which has created more counties than any other states except Texas (256), Georgia (158) and Virginia (136)? (120 counties have been established in Kentucky.) Because of the difficulty of the terrain, small counties made sense—and a large number of very small county school systems followed. In large parts of Kentucky, the public schools are still the largest employers in the county. Kentucky politics has a distinctly *local* flavor for this reason, and political patronage has existed in local schools because schools meant jobs. Having 120 counties (California has only 55, New York 62) makes the state difficult to govern; it is hard for Kentucky to "get its act together."

One look at the map below, and a basic truth about Kentucky should leap out at you—like all Appalachian states, Kentucky's metropolitan areas are shared with neighboring states rather than being self-contained within the state's boundaries. The largest metro area in Kentucky is Cincinnati-Hamilton, which is 18 percent in Kentucky! Even in the Louisville metro area, only 83 percent of the population is in Kentucky, while the fastest growing metro, Clarksville-Hopkinsville, is primarily in Tennessee. Five of the seven metropolitan areas in Kentucky are shared with another state. In addition, only 45 percent of Kentucky's population lives in metropolitan areas, suggesting a very rural state. One can readily see from this analysis why states in the Southeast have had to work together, through interstate compacts and regional planning commissions. The benefits of cooperation are obvious in this part of the U.S.

With this as background, let's look at some basic data describing Kentucky:



KENTUCKY PROFILE

1970 Population	*	3,220,711	
1980 Population	23rd	3,660,000	
1990 Population (Projected)		4,073,400	
1980 Black Population	22nd	259,477	7.1%
1987 Black Population	*	275,940	7.3%
Hispanic Population	36th	27,406	
Born in another country	49th	*	0.9%
Born in another state	49th	*	20.6%
Percentage of Population over 65	26th	11.2%	
Percentage of Population under 18	14th	29.6%	
Median Age	34th	29.1 years	
1987 Median Age	*	31.0 years	
Adults completed high school	50th	51.9%	
Adults completed college	48th	11.1%	
Married couple households	4th	65.4%	
Owner-occupied housing	15th	70%	
Median household income	45th	$13,965	($21,160 in 1987)
Women in the labor force	49th	43.6%	
Housing value	47th	$39,400	

*Data Not Available

From this analysis, some things are very clear. Given the very small number of people who move to and from the state, tomorrow's Kentucky is clearly today's Kentucky if you wait a bit. Education becomes a vital matter here, as the kids in school will actually become tomorrow's Kentucky voters, workers and consumers. (In Nevada, 70% of tomorrow's adults will be different people than the school population; in Kentucky about 80 percent of tomorrow's adults will be *today's* Kentucky school kids.) In addition, minority populations in Kentucky are small, and the percentages are even smaller. The growth of the black population in Kentucky is very slow, making it difficult for blacks to move into political leadership, as well as difficult to start small businesses, the two classic routes to minority progress in the United States. Population pressures *do* translate into political pressures through time, as we are now seeing with Hispanic and Asian Americans. It must be said, however, that the major issue in Kentucky is not ethnic relations, which have been good through the years. *The* issue is white and black rural poverty, one of the most intractable problems in America, often ignored by the current concern with urban poverty.

Levels of education in Kentucky are very low, as the need for a well-educated workforce was not great, as we shall see. Only about half of the adult population has a high school diploma, and one in about ten has a college degree. Today, however, it is clear that many of the industries which undergird Kentucky's economy will have to have smarter workers to compete in the future. To complicate the picture, a number of workers in newly created service jobs will need fewer skills.

Although Kentucky currently has a large percentage of young people in its population, (the Baby Boom was a strong force in this state), they move rapidly into their late thirties by 1990, while the elderly population increases at a slower rate, and the college age population declines. A very small increase in very young children will cause scattered increases in elementary schools, even while high school numbers decline for a couple of additional years. Kentucky will be faced with a gradual increase in services for the elderly in the future, which will increase as the large number of Baby

Boom adults, now in their middle years, begin to retire around the turn of the century. The large number of today's Kentuckians in their late thirties and early forties need promotions and increased income, as their responsibilities are generally increasing. It is questionable whether Kentucky's economic system can meet these expectations.

The social values of Kentucky are traditional—women are not supposed to work outside the home. The notion that people should live in homes they own and share the house with a person they're married to is still alive and well in Kentucky. However, without two incomes, few American families can live a middle-class life today, resulting in very low Kentucky household income figures. Because of the small number of new people entering the state from other states, countries, regions and ethnic backgrounds, the tolerance for diversity in Kentucky has declined as an economic necessity as it has increased in some other states. (Remember that Kentucky was the "Golden West" in the 18th Century.) Partly as a result, poverty is high in Kentucky, 14.8 percent of the total population in 1980, 21.2 percent of school age children, almost 30 percent of all children (the poorest are the youngest). Unemployment, very high in certain parts of the state, has helped to keep income down.

Before moving to an analysis of the Kentucky educational system, let's take a deeper look at Kentucky jobs and industries. The following table shows first the percentage of all Kentucky workers in each area; second, the workforce compared to national norms, assuming 100 as the median for the nation:

JOBS IN KENTUCKY

	% OF WORKERS	*U.S. INDEX*
AGRICULTURE, MINING, FORESTRY, FISHING	8.5%	213
CONSTRUCTION	6.1%	103
MANUFACTURING	22.5%	100
TRANSPORTATION, COMMUNICATION	7.3%	100
RETAIL, WHOLESALE	20.2%	99
FINANCE, INSURANCE, REAL ESTATE	4.6%	77
BUSINESS, REPAIR, PERSONAL SERVICE	6.8%	81
PROFESSIONAL SERVICES	18.9%	93
PUBLIC ADMINISTRATION	5.1%	96

Although the state is *much* too dependent on agriculture, mining, forestry and fishing, this profile suggests some optimistic aspects of Kentucky's future, particularly in terms of diversification, or the number of arrows in the state's economic quiver. First of all, construction is a very good predictor of future economic growth (it's hard to imagine a state with a growing economy and *declining* construction industries), and this indicator signals some signs of future growth, even though a fair number of construction workers are unemployed in the state. In addition, the economy shows more balance than most other Appalachian states. The only weak side is in the high end of the services sector—especially financial services, business services, real estate, technical services, etc. This is the part of the American service economy that is growing in terms of well-paying, middle-income jobs. Even professional services are about at the national norm, although the *distribution* of professional workers throughout the state is not at all even, meaning that quality of life is undermined in some areas due to the lack of professional services in that part of the state.

Kentucky will add jobs in the future, but the concern should not just be with job creation but with pay levels and advancement potential as well. The low end of the

service economy is increasing fast, and a large fraction of these jobs pay minimum wage with virtually no advancement. *This* is why last year, 3.4 million Americans worked full-time yet were eligible for poverty programs. This part of the economy is alive and growing in Kentucky:

WHO DOES WHAT IN KENTUCKY?
(Total Kentucky Workforce—1,338,000)

Accountants and auditors	10,400
Engineers	13,300
Doctors	4,900
Dentists	1,300
Lawyers	5,300
Computer programmers	2,200
Secretaries	46,500
Fast food workers	60,600
Janitors	39,900
Assemblers	30,600

The jobs at the bottom of the column are increasing in terms of new jobs created far more frequently than jobs at the top. We give much attention to the education of the future computer programmer, but virtually none to the future cashier, even though there are about 18 new jobs for cashiers for every new job for a computer programmer in the U.S. at present. How can we stimulate the economy to create more well-paying, interesting jobs in the services? No one seems to know. One thing that *is* known is that big companies lose more jobs than they create. The typical new job entering the economy is located in a small business. In this regard, the deliberate encouragement of small business starts in Kentucky, from basic management start-up training to venture capital formation, becomes a very desirable activity for Kentucky, along with the "Toyota Strategy." The fact that Toyota will open a plant in Kentucky, adding jobs, spin-off companies that will provide related products and services, and cultural diversity, is an optimistic sign, especially if Kentucky can improve on the experience of Tennessee and other states.

KENTUCKY PUBLIC SCHOOLS PROFILE

	1970	1982	1984
ALL	717,000	651,000	644,421
9-12	204,000	194,000	193,310
K-8	513,000	458,000	451,111
PRIVATE SCHOOL ENROLLMENT (1980)		69,728	
	1973		1985
PER-PUPIL EXPENDITURE	$ 790		$ 2,853
TEACHER SALARY	$8,891		$20,940
STUDENT TEACHER RATIO (1985)		19.2 to 1	
POVERTY (age 5-17)	21.2%*		
HANDICAPPED	11.5%		
GIFTED	2.9%		
MINORITY (1984)	11.0%		(10.6% Black)
RETENTION TO HIGH SCHOOL GRADUATION	44th		66.9%
FUNDING % FOR EDUCATION	1973–74		1985–86
FEDERAL	7.0%		3.7%
STATE	38.4%		58.2%
LOCAL	54.6%		38.1%

* U.S. children age 5–17 in poverty–15.3%. All U.S. children in poverty–24% (1985).

Although education is an important component of every state, it seems particularly crucial for Kentucky's future, for the reasons we have stated. Let's now take a look at the public school system for the state.

We see a portrait of a state with declining youth populations which have bottomed out and which will see some expansion in the elementary grades, but slowly. (First grade enrollments were 55,210 in 1984, 55,543 in Fall,

1985). Private schools play an important role in Kentucky, but nationally such schools represent about 12 percent of total enrollments and in Kentucky about 10 percent. While per pupil expenditures appear to have increased substantially, in terms of *constant* dollars there has been no increase to speak of—the U.S. average for expenditures was $3,677 in 1985-86. Teacher salaries nationally are now at $25,257.

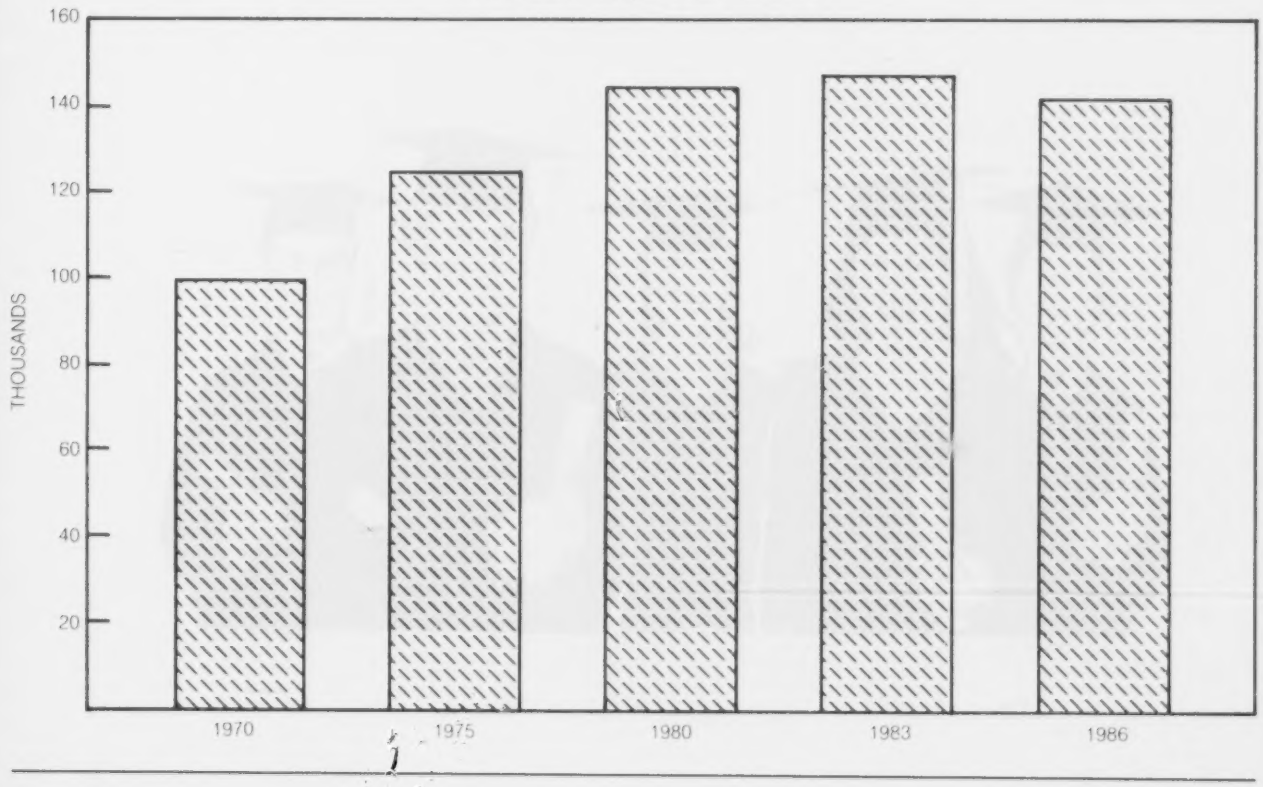
Minority populations in Kentucky are extremely small, particularly for the Southeast—minority students are approaching 30 percent in 1987 in the country, only 11 percent in Kentucky. The Kentucky minority population is almost entirely black. Youth poverty in Kentucky is both whites and blacks. Estimates of the 3 and 4 year-olds in Kentucky in 1983 found 31 percent of them below the poverty line, compared with 25 percent in the U.S. If one adds the poor kids (30%) and the black kids (11%) and the handicapped kids (11%), even with the duplication in the groups, it is entirely safe to say that more than one-third of Kentucky's little children have the cards stacked against them, and that rural poverty for kids is not bound by race. There are clearly "two Kentuckys." Poverty is concentrated in the rural eastern portion of the state, especially the Fifth and Seventh Congressional Districts. Recent efforts at bootstrap operations in the Fifth District are very encouraging, as people take control of their own destiny.

Programs like Head Start that focus on early childhood development seem essential in Kentucky, even though many in the state claim the lack of resources for such programs. Early childhood programs seem expensive, but this cost is nothing compared to *not having* such programs. Eighty percent of America's prisoners are high school dropouts, and each prisoner costs over $20,000 to maintain for a year. One prisoner in jail for five years takes the resources that would put *40* children through a Head Start program!

Our table also shows that more funds are coming from state sources in Kentucky, and a declining percentage from counties and school districts. School funding has been a tough issue in Kentucky for years—in 1987, 66 rural school districts sued the state to provide more equitable funding, an issue with a very ambiguous history in educational case law. The state sales tax could provide a base for this equity, but a large number of exemptions keep the total funds down. The lottery might help, but Kentucky has a projected shortfall of approximately $450 million in the next two years.

Governor Collins was clearly an education governor, and she has been effective in raising consciousness about this issue. In addition, the 1985 special session of the legislature *did* pass some reforms, including kindergartens, training for school administrators, class size reduc-

KENTUCKY HIGHER EDUCATION ENROLLMENT, 1970—1986



tions and improving teacher salary. In a state with a new governor every four years, and an elected superintendent of public instruction, there is little continuity in education—it is clear that Governor Wilkinson will not have to abide by the efforts of Governors Collins or Brown. Indeed, even before he is elected (this is written on the day of his election) his interest in magnet schools and "excellence" would take the state in very different directions. Almost any serious educational changes take more than four years to pull off, and Kentucky seems never to have more than four years. The best antidote is local citizen concern and empowerment. That, fortunately, is beginning to develop around the state.

Like other states with large Baby Boom populations, Kentucky higher education has had to run to keep up, by adding community colleges, upgrading existing colleges and universities, and adding new professional schools. But that era is now over, as enrollments show:

Total Enrollment
Kentucky Higher Education
1970-1986

1970	1975	1980	1983	1986
98,591	125,253	143,066	146,503	141,875

In line with our earlier point about race relations, it is interesting to observe that blacks are represented in Kentucky higher education by about 8 percent of total registrations in 1984, almost their percentage of the population as a whole. If proportional representation in higher education is a goal, it is hard to fault Kentucky in this area, except for the American Council on Education report indicating that the number of black students attending four-year institutions in Kentucky has declined from 6,800 in 1980-81 to 6,000 in 1984.

Overall, however, the era of Baby Boom enrollment increases has come to a halt, and further declines can be anticipated in "conventional age" higher education enrollments, until close to the year 2000. (On the other hand, if secondary schools improved their graduation rates, more of the 40,000 high school seniors each year might go on to attend college, and the 40,000 could be pushed to 50,000 seniors by retaining more students in the public schools.)

At the present, adults in Kentucky are seeking further education as never before, as new job opportunities expand. The Kentucky Literacy Commission reports that in the first six months of 1987, 8,105 Kentuckians received their G.E.D. certificates. Adults represent the major source of enrollment expansion in higher education in the next decade, and there is evidence that this is happening. The Council reports public enrollments in higher education up from 116,346 in 1986 to 124,932 in 1987 (preliminary estimate).

About 5,000 students from Kentucky schools leave the state to go to college in other states each year, while about 7,000 students come to Kentucky's colleges and universities from another state, as of 1984. Although many higher education leaders in Kentucky are very critical of the "raw material" that comes from Kentucky's schools, the actual scores on ACT tests of entering Kentucky freshmen are not bad—17.9 for the class of 1985, a little ahead of Oklahoma and Alabama, one point behind Michigan. (These tests should be taken with many grains of salt as good indicators of college performance, but they are one of the few single-score barometers we have.) In this regard, Kentucky higher education is really not being held back by the quality of entering students.

Kentucky's 58 institutions of higher education (as of 1986) enroll about 116,000 students in public institutions, and 20,000 in independent ones. As in other states, independent enrollments in Kentucky fell from 27 percent in 1967 to 16 percent in 1984, which sounds rather dramatic. But looked at in terms of actual numbers of people, independent enrollments only dropped during that period from 24,125 to 22,578, hardly the end of the world. Some *stability* in the system is provided by the independent enrollments, as public institutions absorbed most of the increased youth "supply" during the 60's and 70's. Some public institutions seem to have bottomed out on enrollments and are beginning to show increases. The state's 14 community colleges have potential for further growth given their 1985 enrollment level of 23,767 and 1986 enrollment level of 25,569.

As we said at the beginning, Kentucky is a state of contrasts. In any such state, state averages may hide as much as they reveal. For example, retention to high school graduation in many Eastern counties in Kentucky may run around 25 percent, while around Lexington it may exceed the national rate of 73 percent. Similarly, childhood poverty is *uniquely* concentrated in the eastern third of the state. In this area of the state, schools have meant *jobs*, and thus the performance of the schools was based, at least in part, on their ability to provide jobs for politically important people in the counties. This same orientation has been traditional in state politics as well, in that the political process was used as a major source of jobs. Kentuckians love their politics—elections are held every year, and Kentucky politicians can literally spend almost all of their time running for office. (With a new governor every four years, one of the major entertainments, at county and state levels, has been elections. The coal, horse, whiskey, transportation and oil interests are still alive and well, and the state legislature as well as Washington, D.C., are well aware that tobacco is grown in every one of the state's 120 counties.)

Although the political system and the spoils system have been very well coordinated in the past, the state has fairly recently been dotted with excellent reports on Kentucky's future, put together by a large band of Kentucky's public spirited citizens as well as governmental units. They range from the two major reports of the "Prichard Committee," *The Path to a Larger Life*, and *In Pursuit*

of Excellence, through the excellent papers from the Shakertown Roundtable, the well done *Strategic Plan for Higher Education in Kentucky, 1985*, the fascinating symposium on the information age, *21st Century Resourcefulness*, and the comprehensive analyses of teacher education, vocational/technical education and special education in Kentucky. This is not a complete list, but the quantity and quality of reports analyzing Kentucky's educational problems and the alternative solutions thereto is simply amazing.

With this relative abundance of analysis and urgent recommendation, the reports have not immediately initiated action at the state, city or county levels, although the actions of the Prichard Committee, Kentucky Advocates for Higher Education and many other groups have had significant local and regional support during 1987. This comes at a time when other southeastern states were engaged in major educational reform and upgrading efforts, best symbolized by Mississippi's decision to promote kindergarten statewide, even though they did not have the funds in hand when the legislature passed it. Other states have accomplished change through exceptionally able governors and the knowledge that educational improvements take time to implement, certainly major factors in the successes of Governors Hunt, Alexander and Clinton, to name but a few.

Governor Collins has clearly focussed Kentucky's attention on specific educational reforms and has carried some to action. Yet as this is written, Mr. Wilkinson, a self-made millionaire and newcomer to politics, has just been elected Kentucky's governor by a landslide. It is not clear what the new governor will do—he may move far from the reforms already developed in the past. And herein lies the problem—Kentucky gets a new set of educational clothes at least every four years, before the old set is properly broken in.

There are many recent efforts to involve Kentucky's citizens in grass roots discussions of educational issues, including the 1984 Town Forums that involved about 20,000 Kentuckians in 145 communities, and the recently established Kentucky Center for Public Issues, and some of the activities of the Shakertown Rountable, to name a few, and there is some significant local action, especially in the Fifth District. But successful change requires a sense of a larger political commitment than the county. Local leaders must feel that their efforts are congruent with, and supported by, state leadership. It is this sense of *partnership* across governmental levels that is so difficult to pull off in Kentucky. Yet, given the particular qualities of the state we have described, it is difficult to imagine major educational improvements in Kentucky through action in a few local communities. The state *must* get its act together on the education agenda.

GENERAL CONCLUSIONS

Kentucky is a state of extreme contrasts in virtually every area of human endeavor. Although it is a southern state, its black population is small, and not growing rapidly. There are rich people and poor people, unequally distributed throughout the state. The state does not seem to possess the middle-class majority that so dominates life in most other states. If only half of the adults possess a high school diploma, one can assume that many Kentuckians are not avid readers, and only 57 percent vote in national elections. Because Kentucky ranks 49th in people born in another state, change must come through the *existing* Kentucky population—today's Kentucky kids will, more than in any other state but one, become tomorrow's Kentucky adults. Yet one-third of today's youth in that state face adult life without the advantage of a high school diploma. Although higher education has expanded and diversified in the last decade, the next decade will see further growth in adults returning for additional education, plus the possibility of increasing the (low) percentage of Kentucky youth who graduate from high school. What follows are some suggestions for this very complex state:

1. The state has been studied and analyzed virtually to death. These reports are of excellent quality, and present both an excellent analysis of Kentucky's problems and some good proposed solutions. In 1987, some parts of the state are organizing to improve education. Some reforms have been proposed by Governor Collins and passed by the legislature. However, these reports and reforms are *segmented* to one area of education, one area of employment, etc. The state does not have a single document which represents the state's consensus on priorities for action. Each segment plans its own future, with not enough concern for the entire state's needs. It seems important that energy be focussed on action programs for the next decade, making use of the many fine analyses already completed.
2. There is one condition which consistently dominates the thought of anyone who looks at Kentucky—*rural poverty*. Behind the low ratings on adult educational attainment, low high school graduation rates, and difficulty in finding skilled workers, one finds this as a root problem in the state. Rural poverty is one of the least understood and most intransigent problems around, although programs like "Forward In The Fifth" show some promise. One reason is that some rural citizens are not sure how good an educational system they really want, as if their kids get too educated they might leave home, etc. Another is the very large number of counties.

   The approach which has the best chance of making a long term difference is a stress on *early childhood programs of the Head Start variety*. Age six is too late, according to most of the evidence. Programs for four and five year-olds, especially those emphasizing parent participation, have an excellent track record, even though high school achievement does not increase until these four year-olds get to be seventeen, and Kentucky politics may not wait for thirteen years. To focus mainly on high school improvements when so many kids are entering kindergarten "at risk" doesn't make much sense. An early childhood program would, however, pay off in improved elementary school achievement scores in a few years, so that politicians could point with pride to a new cohort of kids moving through the system without the crippling disadvantages that held back their elders. Every year, the state could look forward to increased performance at the next grade level, as well as all the earlier levels behind that first group.

   Higher education must push on with the new and better programs for traditional aged and adult students. But it can also support more successful elementary and high school programs and train better teachers.
3. All the parties at interest would have to get behind a program like this. Higher education would have to publicly support programs of early childhood education as a major solution for the long term. To the charges that such a program would be expensive, one can only answer that the *absence* of such a program would be ten times as expensive, in terms of jails to be built, poverty handouts, drug clinics, etc. Remember that 80 percent of prisoners are high school dropouts, and that the costs of one prisoner for five years would fund *40* kids in pre-school programs. What's more expensive, the prisoner or the 40 kids?

To sprinkle a few drops of resources on all areas that have need would simply be to grow a weak crop, once again. It is unlikely that the new governor would be so radical in his approach—he is more likely to reward the small number of "excellent" schools with increased funding, leaving the larger issues we have discussed relatively untouched. Higher education in Kentucky has supported public schools in the past, and hopefully will see such a targetted effort as being in its long-term interests. But when one sees distinguished business leaders testifying in Washington on the vital importance of Chapter One legislation supporting anti-

poverty activities for young children, one has hope. The state has had enough segmented analysis and planning plus a good start at grass roots activity—it is time to think about a strategy for the state's future. That strategy must have a clear focus, as Kentucky dollars are precious. What is proposed here has worked in other states, and can work in Kentucky.

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KENTUCKY—SUMMARY OF MAJOR POINTS

1. Kentucky is the quintessential contrast state—rich and poor, beautiful and ugly, peaceful and violent, advanced and behind. The people who live there were born there, meaning that in Kentucky, more than almost any other state, today's kids will be tomorrow's adults. Given that only half the adult population has a high school diploma, and that poverty among Kentucky children runs rampant, education is *the* critical lever for the state to use in improving its future.
2. Kentucky, for geographical and other reasons, has 120 counties, the fourth highest number in the nation. Politics have been localized, and schools (still the largest employer in many counties) have played the role of providing jobs for politicians. That era is coming to an end in most of the state, but the problems of an educational system heavily political in nature remain.
3. Another problem is that five of Kentucky's seven metropolitan areas are shared with another state, a fairly common situation in Appalachian states. (Indeed, the largest metropolitan area in Kentucky is Cincinnati–Hamilton!) Thus, Kentucky needs to work with surrounding states to a very high degree.
4. In Kentucky, blacks are only about 7 percent of the state's population, very low for a southeastern state. Low educational performance can definitely not be blamed on the state's minorities alone. (Actually, higher education admits black students proportionately to their percentage of the population, and race relations have been good for the most part.) Although research indicates that social class is more important than race in predicting achievement, it takes a state like Kentucky to demonstrate that principle in terms of rural poverty.
5. Kentucky has jobs, but they are not located where people are. In addition, many of them pay very little. Kentucky's new Toyota plant is a significant step in the right direction. In addition, Kentucky needs to generate a large number of small businesses which would in turn develop well-paying jobs in both services and in certain manufacturing areas. There is a need for additional jobs, but these need to be middle income, and need to be located where they will do the most good, particularly in the Fifth Congressional District. There is more potential in the Kentucky economy *outside of Louisville and Lexington* than most Kentuckians will admit.
6. Kentucky has developed, over the past few years, a variety of excellent studies of the state, particularly its educational system. In 1987, the state is beginning to develop local responses to these issues, but the new Governor can take the state in totally new directions in education.
7. There is a root cause of Kentucky's problems—rural poverty. A systematic attack on this one issue, pulling together local, county and state leadership, and working through a strategy focussed on early childhood preschool programs, would have the best chance for success.

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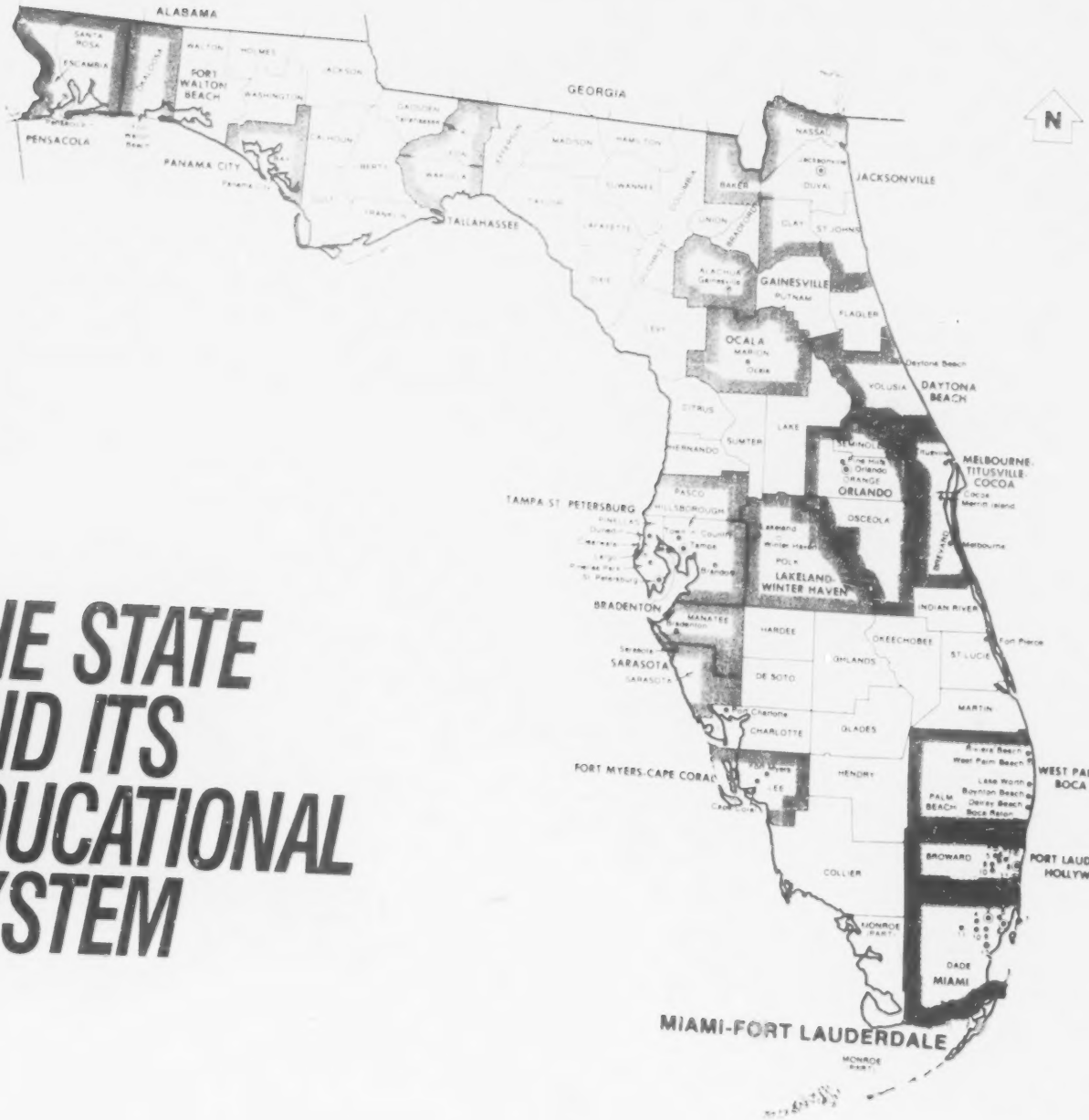

THE STATE AND ITS EDUCATIONAL SYSTEM

THE INSTITUTE FOR EDUCATIONAL LEADERSHIP, INC.

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COVER NOTE:

This "people map" of Florida shows the state's 18 metropolitan areas in which 88 percent of the people live. During the 1970's, every metro area in Florida grew by at least 19 percent.

FLORIDA:
THE STATE AND ITS EDUCATIONAL SYSTEM

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The Institute for Educational Leadership

April, 1988

FLORIDA: THE STATE AND ITS EDUCATIONAL SYSTEM

If one assumes that America in the future will consist of a rapidly aging white population, a large but stable black population, a rapidly increasing, diverse and youthful Asian and Hispanic population, a new blend of service and "high-tech" jobs, rapid immigration from many nations, a declining base of middle-class people of working age, transiency and crime, environmental vulnerability, contrasts in wealth, social systems that cannot keep up with growth, exciting new social and political innovations and the agony of unfilled expectations, then Florida is the future of America, more than any other state.

The problem in talking about Florida is that it is not yet fully formed. Just as the Florida land mass hauled itself out of the sea later than the rest of our continent, so the state's distinctive social, economic and cultural systems have not yet matured. One meets few native Floridians on the streets, and most immigrants to Florida have come with deeply personal motives. Even people who *live* in Florida do not seem to think of Florida very often. The state has been called in *The Sunrise Report* a "state of exiles," others have called it the "every man for himself" state. Two massive waves of immigration, one interrupted by the Great Depression, the other still going on, have each influenced Florida in different ways. Wealthy hotel and railroad owners Flagler and Plant started the first wave in the 1880's, and brought Florida most of its upper class, travelling on Flagler-Plant trains to Flagler-Plant hotels. (Ironically, the wealthy also brought their servants—as the rich settled into Palm Beach, the black servant class settled in West Palm Beach, a community established for "the help." Everyone was there except for the middle class, a problem which plagues parts of Florida even today.)

This first boom, which later brought in thousands of land speculators, lasted until 1926, when the roof fell in. However, after World War II, air conditioning and air travel made Florida a haven for year-round tourism and retirement colonies, and in the 1960's the space program brought new opportunities for expansion.

Income taxes are still illegal under the state's constitution, and the sales tax clearly affects the poor more than the rich. Corporate income taxes help, but the state has always been in dire need of state funds, largely because of the *enormous number of people who require services*. (It needs to be said that retired populations are often net income producers due to the federal pass-through money which benefits the state in many ways. In 1985, $11.5 billion in social security and other transfer system monies entered the Florida economy.)

Manufacturing, also, found Florida irresistible for three reasons—almost nonexistent taxes, cheap labor and plenty of sunshine. These same three have given Florida a basically profitable agricultural base, even with poor soils and drainage and probably the highest "bug per plant" ratio in the U.S. But for most of this Century, Florida's economy was of the "boom or bust" variety, due to the three legs on its stool—citrus, tourism and construction. Since the 1960's, however, the Florida economy has diversified, bringing a variety of "high tech" manufacturing and high end service businesses to the state, especially financial and business services, technical services, (even more) real estate, legal services, etc. Areas known as "Computer Coast" (Miami, Dade), "Space Coast" (Melbourne, Orlando), and "Technology Bay" (Tampa-St. Petersburg), suggest this diversification. In this regard, Florida resembles California and New York more than Texas, which maintains its Recession-prone "thin" economy. Still, wages in agriculture and tourism are so low that Florida suffers in terms of per capita income. The income averages in Florida are very misleading in these categories—if you average high and low incomes, you get middle income numbers, but they don't mean much.

Much has been made of the fact that the population "balance point" has been moving south and west. Yet, in 1987, migration to Texas and California showed a remarkable slow-down, as the economies in the Mid-Atlantic and New England states staged a remarkable comeback. (In fact, in 1987, more people moved from Texas to Michigan than moved from Michigan to Texas!) Thus, in 1988, we must face a country in which the *population* moves slowly south and west, while the *economic* center of the nation moves to the east! While Texas and California growth rates will decline, the already high rates of migration to Florida from other states will increase. It also seems very unlikely that immigration from South and Central America, the Islands and various Asian nations will slow down before the year 2000.

The growth numbers are staggering. In the first half of the Eighties, six of the eleven fastest-growing areas in the U.S. were in Florida. (However, to keep one's perspective, the actual numbers of people are not as heavy as the percentage of growth):

FLORIDA TOP GROWTH AREAS
1980–1987

	1984	1980–84 Percentage	1987	1984–87 Percentage
Naples	110,000	29%	126,000	15%
Ocala	155,000	27%	173,000	11%
Ft. Pierce	190,000	26%	213,000	12%
Ft. Myers—Cape Coral	252,900	23%	285,000	13%
Melbourne—Titusville	329,500	21%	363,000	10%
West Palm, Boca Raton, Del Ray	692,000	20%	764,000	10%

The diversity of background by age and ethnicity is equally staggering. Florida is the gateway from South and Central America, as well as the Caribbean Islands. When Castro came to power, the elite of the Cuban workforce—professionals, technical experts, managers, etc.—came to the U.S. and established many businesses, including major trade relations with South and Central American businessmen. Cuba's later immigrants, the Marielitos, are a very different group. Haitians have become a major new immigrant group, especially in Dade County, while Puerto Ricans have moved in waves to both Florida and the New York City area since the turn of the Century. It is strange that so little is heard about the largest minority group in Florida—blacks.

A special word needs to be said regarding drugs, Florida's most intransigent problem. The state's coastal borders are almost impossible to patrol. Seventy percent of all cocaine in the U.S. comes in through Florida. The drug economy, estimated at 5 to 10 *billion* dollars a year, has had a major impact on most legitimate businesses and commercial transactions in the state, and the first-time cocaine user is reported to be 12½ years of age. The size of the enterprise is so vast, and the profits so high, there seems to be no clear strategy that would reduce the amount of cocaine and other drugs flooding into Florida. Certainly, supply will continue at its present level unless *demand is reduced*, and no one knows how to bring that about. Like childhood poverty, the issue of drugs has not yet become a clear priority for our nation, even with all the slogans and banner-waving. Population increases will clearly make the issue more dangerous in Florida's future.

This much population growth has strained the natural ecosystems from water to soils, and has placed even more stress on the *human* systems in the state. Florida relies on ground water for much of its supplies, (about 88%) and the potential exists for lowering the water table for fresh water, increasing the salinization of fresh water supplies (the Sahara was once fertile crop land until salt water got in) and the poisoning of a large part of the ground water. Demand simply exceeds safe supply.

People have the same problems—30 percent of the youngest children in Florida are in poverty, one of the highest figures in the nation. According to the (excellent) *Sunrise Report*, 62 percent of children receive no preventive health care, 50 percent have no safe child care, and 90 percent of teenage mothers are not in school. It could easily be argued that *half* of all the children added to Florida's population are at risk of failure, socially, educationally and occupationally. In the criminal justice area, some 2.9 million Floridians are "under supervision." Traffic jams are world class in much of Florida, health care is not, and increasing population densities are making it unlikely that people can find what they came to Florida for in the first place.

The legislature has become more conscientious in terms of its own operations—a far cry from the days of the "Pork Chop Gang." Although the Sunshine Laws may have been overdone, there is no doubt that when legislators can see themselves on television in the process of legislating, (Florida was the first state to do this), the results are salutary. Even in higher education, the empire building tendencies of the Sixties have given way to more concern for the state's entire higher educational efforts, and less to individual campus aggrandizement.

Recent legislation indicates genuine concern over environmental impact and improving the quality of life of the people, even though the revenue base is still woefully inadequate, and the state must play "catch-up" with many areas of concern. To indicate the urgency of demand for services, Florida ranks *41st* in general revenues per capita, 38th in state and local workers per 10,000 population, 49th in federal grants to states and localities, and 23rd in Federal defense research contracts.

Certainly former Governor, now Senator, Graham has attempted to *plan* Florida's future, an idea not always respected in Florida's past. Senator Chiles has also provided major leadership for the state in Washington and at home. "Every man for himself" is less true in Florida today; and reports like *The Sunrise Report*, the February 1987 report of the Comprehensive Plan Committee entitled *Keys to Florida's Future*, as well as the excellent publication from the State Department of Education in April, 1987 called *Priority Policy Issues* suggest a very

sophisticated concern for increasing the quality of life for *every* Floridian. But is it too little and too late, given the likelihood that growth in Florida will be maintained and even increased in many sectors? Let's now look at the basic data on Florida.

Here is a truly unusual state profile. The state's population is large, and is moving up in the rankings. (We'll examine in a minute who is coming to, and who is leaving, Florida.) Remember that *79%* of the state's population was born in another state or another country. The state has the oldest population in the U.S., not only because of the large number of elderly but also because the fertility rate among its younger citizens is so low. Because most Floridians were born in another state or nation, their roots and identities are to a degree located outside the boundaries of the state. The state's ethnic populations are changing rapidly, except for the largest group. Blacks seem to be stabilizing, while Hispanics of many origins have doubled their numbers since 1980, and many Asian Americans are joining the state as well.

Transiency leads to higher crime rates, and Florida is Exhibit A in that department. (To be fair, the Florida

FLORIDA'S PROFILE

	State Rank	*1980*	*1985*
Total population	**7th**	**9,746,000**	**11,366,000 (6th)**
Black population	**6th**	**1,342,000**	
Percent black	**13th**	**13.8%**	
Hispanic population	**4th**	**858,000**	
Percent Hispanic	**7th**	**8.8%**	
Foreign born	**4th**	**10.9%**	
Born in another state	**2nd**	**68.7%**	
Percent over 65	**1st**	**17.3%**	**17.6%**
Percent under 18	**50th**	**24.2%**	**22.3%**
Median age	**1st**	**34.7 years**	**37.5 years**
Birth rate	**42nd**	**14.1 per 1,000 population (1984)**	
Population density	**10th**		**210 per square mile (1985)**
Autos per 1,000 people	**8th**		**867.6 cars (1985)**
Women in the labor force	**45th**	**45.5%**	
College graduates	**29th**	**14.9%**	
High school graduates	**29th**	**67.2%**	
Married couple households	**42nd**	**59.4%**	
Per capita income	**22nd**	**$ 7,311**	**$13,742 (19th)**
Housing value	**18th**	**$54,000**	
Crime rate per 100,000 people	**1st**	**7,574 (1986)**	
Voting in 1984 election	**43rd**	**48.4% of eligible voters**	

criminal code is so vast that the average citizen breaks many laws just walking—or more likely driving—to the store for a loaf of bread.)

The densities of *both people and cars* are now among the highest in the nation, and clearly both kinds of density will increase in the future. The state's population clearly does not have the educational skills that *may* (or may not) be needed if the "high tech" predictions come true. In addition, per capita income is low, although moving up slightly in the rankings. The actual income data are split, with a large number of upper-middle incomes and a large number of jobs paying minimum wage or less. As expected, minorities are not evenly represented in the two income "bulges." A more accurate view might be that a *young minority population will provide the low-wage services that will be needed by the aging and usually affluent white majority.*

We need to spend a moment looking at Florida's mobility in greater detail. Stereotypes abound in this area, especially in terms of the retirees moving to Florida—actually, only 24 percent of the people moving to Florida are over 60! But if we look at the over-60's for a minute, an interesting fact emerges. From 1975-1980, 450,000 over-60's moved to Florida, but 92,000 over-60's left Florida. Of the "ins," 90 percent were financially and physically independent, while only 60 percent of the "outs" were. The conclusion, which is important to morticians and florists: people move to Florida to *retire*, but after their first major illness or financial trauma, many of them return to their roots—Ohio, Michigan, New York, Illinois—to die. Migration analysis can also tell us some other useful things:

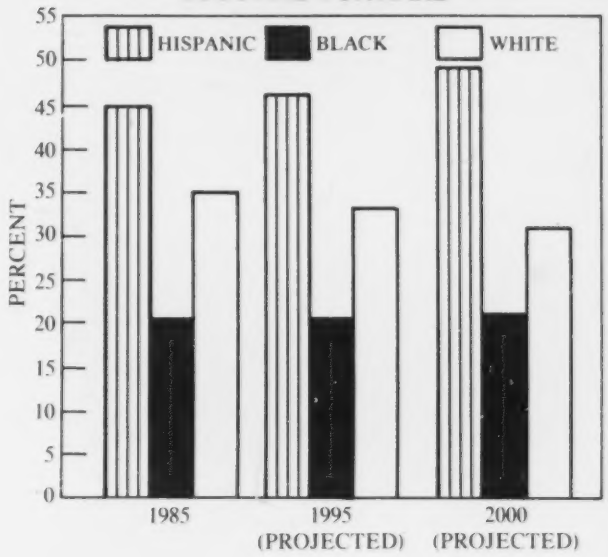
FLORIDA MIGRATION
1975–1980

	ALL	WHITE	BLACK	HISPANIC
IN	2,040,193	1,849,289	113,130	202,315
OUT	978,135	883,010	70,068	40,406
NET	1,062,058	996,279	43,062	161,909

It is clear that during this period, those moving *to* Florida were overwhelmingly white. In addition, for every white or black moving out, less than two moved in. But for every Hispanic moving out, *four* Hispanics moved in. News media frequently report only the "in" while the "net" gives you a much more useful picture. Even with these data, we cannot pick out specific Hispanic groups. It is clear that Mexican Americans have a higher fertility rate than Cubans or Puerto Ricans, but are not increasing in Florida as rapidly as other island groups, particularly Haitians. (While their numbers are increasing rapidly, especially in the Dade County area, they are not "Hispanic" but represent a linguistic and cultural identity of their own.) We need to keep both immigration and fertility rates in mind. The best way to see the future is to look at the present. Dade County may well represent Florida's long term future in terms of population mixes and "minority majorities."

A word of caution here: Florida as a state is not likely to become a "minority majority" in the next twenty years,

DADE COUNTY POPULATION
1985 AND FORWARD



as both Texas and California will, even though Dade and other big counties in Florida will. Thus, there should be more time to plan resource growth for minorities in Florida than in the other two.

We can also look at *urban* mobility in Florida, and here is a very encouraging picture (See chart on page 5). Because the state is so relatively young, its suburbs have been able to expand without killing the core cities that are vital to their survival. Of the 18 metro areas in the state, only Pensacola suffered a decline in city population, and that was only 3.2% while Pensacola suburbs grew 26.5% from 1970 to 1980. In many other parts of the nation, cities have been decimated as homes, middle-class people *and* good jobs have all moved to the suburbs, leaving only restaurants, museums and concert halls to produce income in the core cities. Florida is very urban—88 percent live in the state's 18 metropolitan areas, and have been able to move to suburbs without destroying the city core.

Note the "old" city of Miami with its completed core, compared to Fort Myers—Cape Coral, concentrating more on developing its cores than its suburbs! Can we learn anything from Miami's development that will be useful to the Fort Myers—Cape Coral metro as it goes through a very parallel process? How can Miami be protected from the normal pattern of sucking the life out of the core and sending it (money, well-paying jobs, middle-class housing and middle-class people) to the suburbs? At the moment, even the excellent state master planning documents do not have an answer for that question.

Another area that is closely related to Florida's educational system is Florida's economy and workforce. Here, the state *has* been able to avoid some of the major problems plaguing other states—dependence on agriculture and manufacturing, the major

FLORIDA URBAN AND SUBURBAN GROWTH, 1970–1980

	1970	1980	NET
Miami Metro	1,267,292	1,625,781	+28.3%
Core	334,859	346,865	+3.6%
Suburb	932,933	1,278,916	+37.1%
Tampa-St. Pete Metro	1,088,549	1,569,134	+44.1%
Core	493,873	510,170	+3.3%
Suburb	594,676	1,058,964	+78.1%
Fort Myers—Cape Coral Metro	105,216	205,266	+95.1%
Core	27,351	68,741	+151.3%
Suburb	77,865	136,525	+75.3%

problem for states like Iowa and Ohio. Diversification, the single most important key to economic success for states, has taken hold in Florida. In the chart on page six, the first column indicates the percentage of the Florida workforce in that area, the second indicates the importance of that area for the state's economy compared to the nation, assuming the national median as 100.

Most states would love to have a state profile as diverse as this one! The immediate future of the American economy is in the high end of the service economy, and that is where Florida is remarkably well situated. Construction is the best predictor of future economic activity, which also bodes well for Florida. Transportation is important, not only because of Florida's extensive highway, air and sea alternatives for shipping goods, but the shipping of *ideas* through Florida's many information networks. Like California, Texas, Arizona and New York, economic diversification prevents the necessity of passing through the "smokestack manufacturing" phase of jobless growth, replacing the $14.00 per hour turret lathe operator with the $4.00 per hour cashier, the problem of Michigan and Ohio.

One interesting aspect of population growth is the resultant growth in services needed, especially federal postal services. In 1980 there were 83,052 federal workers in Florida; in 1986 there were 102,249, a 23 percent increase. (For comparison, Washington D.C. federal workers declined from 230,000 to 208,458 during the same years. The Florida "fed" workforce was *half* as big as the "fed" in Washington!) But of the net increase in federal workers in Florida, 15,000 of the 19,000 new workers were Postal Service workers, and most of these jobs are not at the high end of the Civil Service pay scale. At any rate, you can't add people as rapidly as Florida has without adding a lot of zip codes as well, and that means many *federal* service dollars as well as state and local. For the record, there are about 3 million federal workers in all, but each one generates *four* civilian jobs that deal with federal business—in Defense, there are 3 million civilian workers who work on defense contracts issued by the military to their civilian firm. In Florida, there are approximately 400,000 civilian jobs created through the 102,000 federal positions, especially in the space programs and military R and D, but also including agriculture, health, transportation, education, etc.

One key question for Florida concerns the amount of access its extensive minority and immigrant populations have to the large number of well-paying jobs in the state. Here is one place where Florida gets very good grades indeed when compared to other states with the same task, particularly New York, Texas, California, Arizona and Illinois. There are two notable examples—Miami and Fort Lauderdale. Although we normally think of Miami as heavily Hispanic, it is very favorable for black workers and businesses. In the author's *All One System*, Miami beat all other cities in the percentage of blacks living in the suburbs—194,000 out of a metro black population of 281,000, or 69 percent. Next in line were Newark (52.9%), Washington, D.C. (48.5%), Los Angeles (46.5%), Atlanta (46%), Oakland (39.5%), St. Louis (35.4%), Birmingham (34.1%), and Philadelphia (27.7%). (Chicago has some particular problems in this regard, and doesn't make the top 25.)

In the percentage of black, *middle-class* residents ($25,000-50,000 in 1985 dollars), Nassau-Suffolk leads the country, while Miami is second. Tampa-St. Petersburg is 14th and Ft. Lauderdale is 17th, with Jacksonville 22nd. *No other state in the nation has four metros in the top 25 for black middle-class income*, quite a tribute for a state that has not celebrated this achievement, nor tried to maintain or increase its position! (These numbers came from the Washington-based Joint Center for Political Studies in 1986.) Rather than *building* a black middle class, the task in Florida is to maintain and *extend* these economic opportunities for its minority population. It is in a position to lead the nation in this regard, even though groups like the Marielitos may make the task more difficult

FLORIDA BUSINESSES AND JOBS, 1980

	Percent	Index
AGRICULTURE, FORESTRY, MINING, FISHING	3.9%	98
CONSTRUCTION	8.3%	141
MANUFACTURING	12.6%	56
TRANSPORTATION, COMMUNICATION	8.0%	110
RETAIL TRADES	23.6%	116
FINANCE, INSURANCE, REAL ESTATE	7.6%	127
BUSINESS, REPAIR, PERSONAL SERVICE	11.5%	137
PROFESSIONAL SERVICE	18.8%	93
PUBLIC ADMINISTRATION	5.5%	104

as time goes on. In terms of entrepreneurship, Ft. Lauderdale is 7th in the nation in black-owned small businesses per 1,000 black residents, with a level of 16.6 black-owned businesses per 1,000 black residents, according to the Census Survey of Minority Business for 1982.

Data on Hispanics by income and residence is much harder to come by, although the same census survey indicates that half of all Hispanic businesses in the nation are located in Southern California, Texas, Miami, New York City and San Francisco. (What we want to know, however, is how well they are doing, and that is very difficult to discover.) Given the tendency for both minorities and immigrants to get jobs that cluster in the low-paying end of the service sector, and given the fact that those jobs represent the *majority* of new jobs coming on stream, we can see problems developing in the future, unless the minority middle classes are maintained and extended. We need to be clear about the *rates of growth* of certain jobs compared to the total *number* of new jobs which the country creates.

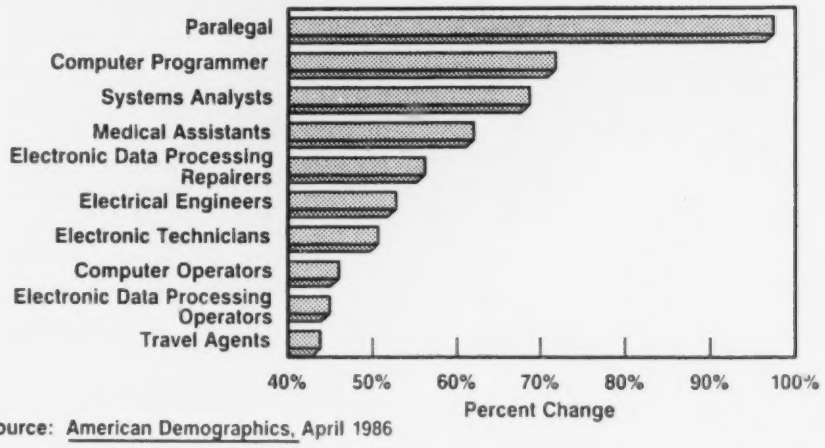
The Florida workforce, according to the *Monthly Labor Review, Winter, 1987,* contained the following jobs:

SELECTED FLORIDA JOBS (Total 4,002,300)

Chemists	2,300
Economists	2,600
Dentists	5,200
Computer programmers	9,000
Finance managers	14,700
Social workers	15,000
Doctors	19,300
Lawyers	20,400
Guards	30,600
Domestics	33,900
High school teachers	32,500
Assemblers	32,500
Engineers (all)	43,900
Nurses	53,700
Elementary teachers	85,000
Janitors	126,600
Secretaries	168,600
Fast food workers	203,000

FASTEST GROWING JOBS IN TECHNICAL AREAS

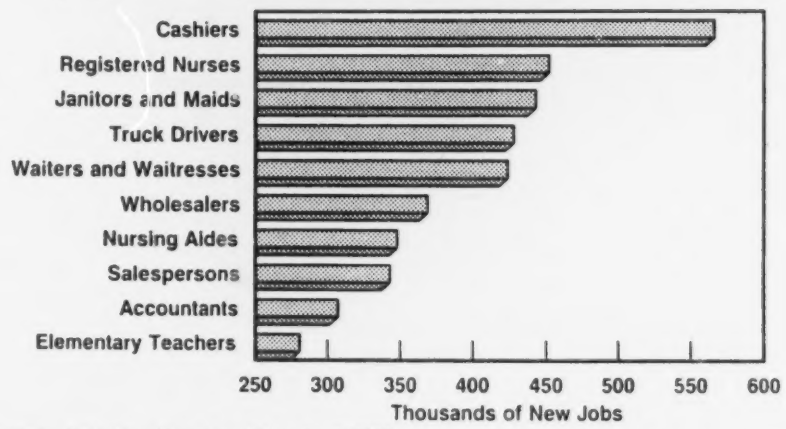
(Fastest Relative Growth, 1985 to 1995)



Source: American Demographics, April 1986

MOST NEW JOBS IN TRADITIONAL OCCUPATIONS

(Fastest Absolute Growth, 1985 to 1995)



Source: American Demographics, April 1986

In terms of the prediction of new jobs in Florida, the Florida Department of Labor and Employment Security expects that the largest numbers of new Florida jobs from 1982-1995 will be as follows:

NEW FLORIDA JOBS: 1982–1995

Sales clerks	43,147
Waiters, waitresses	42,792
General office clerks	37,151
Fast food workers	36,099
Guards and doorkeepers	35,602
*Teachers, elementary**	24,757
Store managers	22,170
Nurses aides/orderlies	19,231
Kitchen helpers	18,750
Truck drivers	18,517

*Includes pre-school teachers

For every new job for a systems analyst in Florida, there will be *7* new jobs for waiters/waitresses!

Florida has several job planning problems. The people who most often end up in the low end of the service sector are women, minorities, and immigrants. Indeed, Florida mirrors the nation in this regard, as 83 percent of the 20 million workers who will be added to the U.S. economy by the year 2000 will be a combination of females, minorities and immigrants. But if minorities and immigrants find themselves blocked at the bottom of the services, with no chance for advancement for themselves or their children, the American dream will become fiction for a large number of Floridians. So far, Florida has a relatively impressive record in producing black and Hispanic middle classes. In the future, that excellent record will have to be maintained and even enhanced, given the likelihood of increased immigration from other countries, and more inmigration from other states.

How could Florida build even more of a "middle" into its service economy? The answer is nobody knows, but small business starts in new service endeavors (financial services, business services, technical services, "boutique" approaches to everything from car washes to butcher shops, etc.) will have to play a major part. A discouraging note is the steady decline in black enrollment in Florida community colleges over the last five years, as these programs usually lead to job mobility.

A word needs to be added on the quality of life issue. In terms of violent crime, Florida is a real leader:

FLORIDA CRIME RATE PER 100,000

Murder:	(4th)	14.5
Rape:	(4th)	56.9
Robbery:	(5th)	355.5
Prisoners:	(7th)	217.0

Florida is 5th in terms of venereal disease rates, for both syphilis and gonorrhea. (But for cities, the gonorrhea rate in Atlanta is *3,114* cases per 100,000 population, Miami's rate is 935 per 100,000.) This factor is increasingly important, as we understand that venereal disease rates are an excellent marker for the potential for AIDS in a given area. Additionally, Florida ranks 4th in the nation in out-of-wedlock births (22 percent of all children born in Florida are born out of wedlock), and is 5th in divorces—for every 1,000 marriages in Florida there are *646* divorces. The state also has a very high abortion rate, with 645 abortions for every 1,000 births. (Although lower than New York State's rate of 666 abortions per 1,000 births, the number still has much demographic significance for Florida's future.) The alternative to abortion is usually single mothers on welfare, a category in which Florida ranks 47th in single mothers making use of federal funds. Only 26 percent of single mothers are receiving federal and state support for themselves and their children, a major reason why so many of Florida's kids are being raised in poverty.

This suggests that people do not behave in Florida as if they had finally found the promised land. Many of these measures are at least partially measures of social dissatisfaction and anomie, based on the twin factors of high density and transiency. To a large degree, these factors transcend race—dissatisfaction can be found in virtually all racial and ethnic groups, and of course, partially in the poor of whatever background.

Florida's Educational System

And which institution in Florida will right the wrongs, get people together, give them a sense of their own potential, and assist them in meeting these positive goals? The educational system, that's who! To say that this is a formidable challenge is to understate the task. Let's now have a look at Florida's public school system to see how well it is doing. The first obvious fact is that although Florida school enrollments have increased rapidly, they have not increased in proportion to Florida's overall growth rate.

However, the growth curve is accelerating, and in *Priority Policy Issues*, issued by Commissioner Castor in 1987, 841 new schools will have to be built by 1998, in order to accommodate new students flooding into the schools at a rate of 60,000 in the school year 1987-88. These schools will cost about $8 billion to construct, against funds being planned at $4 billion. (Funds to operate these new schools will be even more of a fundraising challenge for the state legislature.) One thing demographics can contribute to this plan is a small element of increased chaos, due to the very large number of Florida children who move from one county to another within the state during any given year, plus movement within each county. It seems very likely that by 1998, *a significant number of Florida's school sites will not be where the kids live*. To project in-state migration patterns of children is a forecaster's nightmare. Until we learn how to build portable schools that can

FLORIDA SCHOOL ENROLLMENT, SELECTED YEARS

	1970	1982	1985	1987 (Fall)
ALL	1,428,000	1,485,000	1,562,000	1,658,624
K-8	1,016,000	1,039,000	1,086,000	1,165,870
9-12	412,000	446,000	476,000	492,754

FLORIDA SCHOOL PROFILE

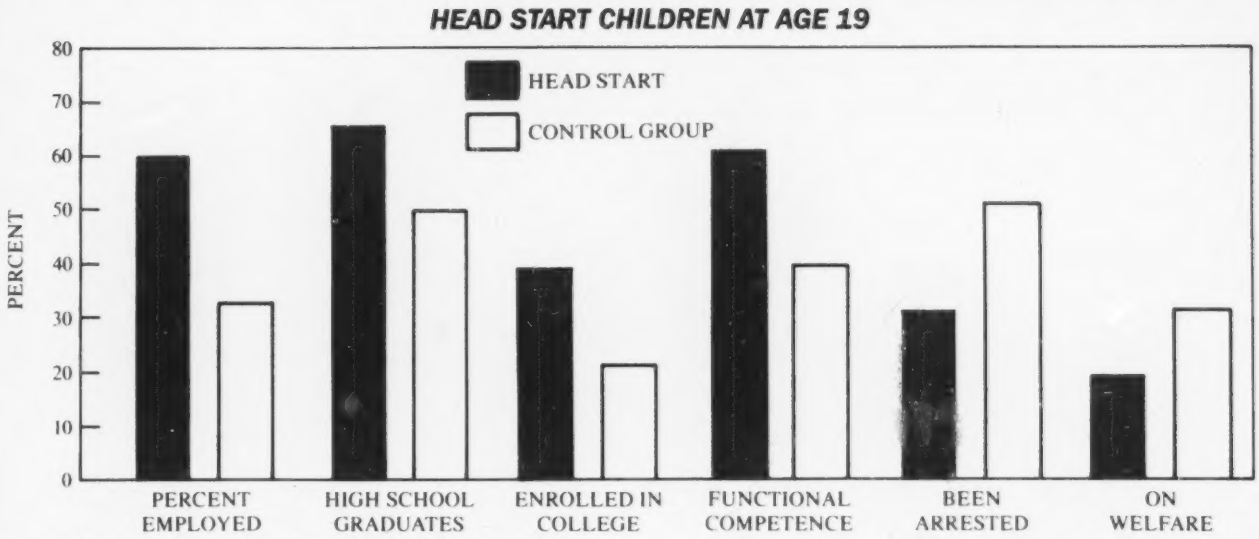
	1973–74	1985–86
Per-pupil expenditure	$962 (U.S. $1,147)	$3,731 (U.S. $3,677)
Teacher salaries	$10,287 (U.S. $11,690)	$22,296 (U.S. $25,257)
Funding: Federal	8.7%	8.0%
State	57.1%	53.4%
Local	34.2%	38.6%

1980 Private School Enrollment:	204,988
Catholic schools	74,268
Other private schools	130,720
Percent of 1982 9th graders graduating in 1986	62.0% (50th)
Per capita income, 1986	$14,646 (U.S. $14,641)
Children in poverty, 1980	17.7% (U.S. 15.3%)
Pre-school age children in poverty, 1987	30% (U.S. 24% in 1985)
Student-teacher ratio, 1982–83	19.9 (U.S. 18.9)
Student teacher ratio, 1985–86	17.7 (U.S. 18.3)
Handicapped students, 1987	11.3% (U.S. 11.0%)
Gifted students, 1987	2.3% (U.S. 3.2%)
Minority students, 1984*	32.3% (U.S. 28.8%)
Black	23.1% (U.S. 16.2%)
Hispanic	8.1% (U.S. 9.1%)
Asian	1.0% (U.S. 2.5%)
Native American	.1% (U.S. .5%)
Bilingual students, 1984	2.2% (U.S. 2.9%)

*Florida minority figure for 1987 is 35% (U.S. Department of Education, February, 1988), not available by race.

travel on interstate highways, this problem will plague a high-mobility state like Florida. Let's look at the schools on some other measures which are shown above.

Some things are very clear from this profile. First, at a time when most states were cutting school budgets due to declining enrollments, Florida was *increasing* in students at a time when the economy was not always supportive. (From 1970-1982, American public schools lost 13 percent of enrollment.) However, this amount and more will need to be invested in new students coming into Florida's system, as we have already seen, and this level must be continued into the 21st Century. At a time when Florida



From High/Scope Foundation, Ypsilanti, Michigan, 1984

will be trying to attract a very large number of new teachers, the average salary is still below the national average, not a good recruiting tool. (It is not clear that "climate factors" can be traded for several thousand dollars of income per year, especially in a state with comparatively high living costs like Florida.) It is also interesting that local support for education is increasing at a time when in the nation it is state support that is increasing. In as complex a state as Florida, with regional differences of great magnitude within the state, local implementation and local leadership make a lot of sense.

Although per capita income appears normal, it must be remembered that Florida is the only state in the southeastern region in which per capita income has attained the national average, unless you include Texas. The regional contrast is much more striking than the national—as we have seen, Florida contains a lot of wealthy people and a lot of poor people, as seen by the high percentage of Florida children in poverty. Given the fact that Florida has managed a considerable expansion in students over the years, being one student over the national teacher-student average of 18 students per teacher is understandable. But Florida must not fall into the California trap—the largest student-teacher ratio in the nation at 23 students per teacher, with very great need for individualized programs given the diversity of student backgrounds. California must both build schools for a growing population *and* try to reduce class sizes considerably, an expensive combination. Nothing is more important for Florida now than to keep classes at their present size or even smaller as the state expands its school student body by about 60,000 a year.

Like California, Texas and New York, Florida is in the bottom ten in terms of retention to high school graduation (62 percent of ninth graders graduated "on time" in 1986, meaning that 38 percent did not). Although retention rates are notoriously inaccurate, the *rankings* may be fairly close. (You never get the mileage the EPA claims for your car, but compared to other makes, the ranking may be correct.) Interstate migration is one factor that messes up the retention numbers, and there is much interstate migration in Florida. However, the 62 percent cited by the U.S. Secretary of Education's "Wall Chart" in February, 1988, (making Florida 50th in retention), is controlled for migration. Remember that many of these high school dropouts will later take the G.E.D., an area of very high participation in Florida. It seems clear that Florida is now sending about one-third of its youth into adult life without even the minimum benefits of a high school diploma. With the efforts in Florida to raise the standards for high school graduation, the result could be an *increase* in dropouts in the state, an event with negative economic and social consequences for every Floridian.

Why are there such economic consequences of increasing the dropout rate? Look at the numbers: *80 percent* of all prisoners in the U.S. are high school dropouts. Each prisoner in jail for a year costs the state (and nation) about $24,000. (In Pennsylvania, it is seven times more expensive to have a person in the state pen than it is to have a person at Penn State, a matter of concern to many legislators when they look at increasing numbers of prisoners in the state's jails.) This does not mean that if all youth in the nation graduated from high school we could close all the prisons. But it *does* mean that not keeping up with educational needs now will result in a large bill for other services later.

The best evidences come from a pre-school program called Head Start. If one tracks the Head Start children through time, it is spectacular to see how different they are from a group of similar children who did not have the program. (See graph above.)

As the children move through their lives, it becomes clear that a dollar invested in Head Start saves *eight* dollars in later services that will not be needed, a rather spectacular return on investment! When we think, in Florida, of the cost of such programs, it is wise to also think

of the cost of *not having* them, a cost which can increasingly be calculated in real dollars, not to mention the fulfillment of human aspirations.

Florida is about on average with handicapped children. (Note that this figure is the percent of children diagnosed and placed in classes to meet their special needs, *not* the percent of children in the general Florida population with handicaps.) Again, it is salutary that in a time of expansion, Florida has not neglected its handicapped children, given the high per-student costs of many of these programs. Indeed, compared to national norms, Florida has fewer children in "gifted" classes than other states. (Again, the figure is for children in gifted *classes*, not for gifted children in the school population.)

Although there is much publicity about Florida's rapidly expanding Hispanic population, the numbers make clear that there are three black children in Florida schools for every Hispanic child. (Although we can only speculate, it is amazing that so much publicity surrounds Hispanic issues in Florida, and so little relates to blacks, given their numbers. Have Cuba, Puerto Rico and other areas sent their best educated, most entrepreneurial people, who plan to build a better life for their children and have the skills and knowledge to bring this about. Why is it a secret that Miami leads the nation in the percentage of blacks who are middle class in income? The data we mentioned earlier show that many sections of Florida are among the best in the nation for allowing blacks to start small businesses, move to the suburbs, etc. But why do we hear so little about blacks in Florida, and so much about Hispanics? (Even Asian Americans, increasing their numbers in Florida but slowly, are rarely referred to in print media and television.)

Minority populations relate to the bilingual effort in Florida, in that less than the national percentage of school children are in bilingual classes in Florida, contrary to our perception of the state. Is it because the number of children who speak a language other than English is below the national average, or is it that some Florida leaders do not believe in bilingual approaches to education? One figure that would be useful would be the percentage of poverty children in Florida broken down by race, to get a sense of which children are economically "at risk." Unfortunately, that is not possible with current data resources.

It also is not possible to get a clear sense of the role of independent schools in the state. About 14 percent of all students attend them, compared to national averages of 12-13 percent. However, Catholic schools in Florida only enroll about half as many students as one would expect from national averages. The comparatively small percentage of Hispanic students in private schools in Florida may be a contributing factor. Given the national tendency for private school students to be underrepresented at lower levels of parental income, it does not appear that Florida's independent schools are helping to equalize equality of educational opportunity by admitting reasonably large numbers of poor and minority students.

One of the most difficult problems facing Florida's future is the increasing competition for scarce resources from both the young and the older populations. Florida's "older" populations are very well organized politically, and have lots of discretionary time (their kids are grown) and discretionary income (75 percent of them live in homes that are paid for). They have been referred to as Florida's "Condo Commandos." It seems vital that the elderly come to see schools as bases for programs that benefit the elderly. They need to be physically in schools, to help out in volunteering, to eat some meals there, etc. As we rethink the nature of "community centers" in America, Florida can be a model for public schools as service centers for citizens of all ages. In Florida, this will be a political necessity in the next decade.

What one sees in terms of Florida public schools is a system which fits a term of the Southern Growth Policies Board—"Halfway home and a long way to go." The expansion which has already happened has been dealt with rather well, although the conditions of Florida youth (one-third of younger children were in poverty in 1987) suggest that future conditions will be *less* favorable to the schools than at present. More youth will enter the schools "at risk" of school failure, and the solution is clearly *not* to raise standards without providing the resources needed to give every Florida child an equitable chance of attaining these standards. Even now, there is an alarming decline in high school graduates in Florida which will be to no one's economic or social benefit.

FLORIDA HIGHER EDUCATION

Although it began planning a state system of higher education a little later than did some of the early "master plan" states (New York and California come to mind), Florida has done very well in building a comprehensive system of postsecondary education. In 1984, Florida's 88 institutions of higher education were enrolling 444,000 students; 354,000 in public institutions and 90,000 in independent colleges and universities. Interestingly, 221,000 were full-time and *223,000* were part-time, a very large fraction of total enrollment. Only 77,000 were first-time freshmen. Here is a system very well prepared to take care of the educational needs of "older" college students, assuming that most part-time students are not 18-22 years old. (For contrast, North Carolina, a state with a much smaller population, had 128 institutions of higher education in 1984, enrolling over 300,000 students, of whom the vast majority were full-time.)

In the last decade, institutions from Florida have leaped into national prominence. The University of Miami, long considered a haven for wealthy surfers, has emerged as an institution of the first rank, particularly in medicine and other professions. Miami Dade Community College could probably win any election for the best community college in the country, the University of Florida and Florida State continue to improve in terms of research sophistication, and part of Florida's attraction for "high tech" businesses is the quality of the Florida higher education system.

Although faculty salaries are a little behind ($29,334 for all full-time faculty, all levels and types of control during 1985-86 with a U.S. average of $32,392), Florida's level of effort for higher education seems to be about average. On appropriations for public higher education students per Full-Time Equivalent, Florida ranks 25th, with $3,484. (One problem the state has that sets it back on measures like this is the extremely high rate of part-time students. Although these students only provide a fraction of a full-time tuition, they need a *whole* place in the parking lot, a whole book in the library, etc. Full-time services for a part-time payment is a financially difficult proposition, especially in Florida.)

However, there are some student flow problems. The number of high school graduates has actually decreased, from 90,000 in 1981 to 82,184 in 1986-87. (Add to that approximately 10,000 graduates of Florida private schools.) A fair number of Florida high school graduates go to college, although 20 percent leave the state to attend college elsewhere. And a fair number of minorities attend Florida higher education—100,176 in 1986, or 20.9 percent. (Remember that about 35 percent of public school students are minority.)

One problem is the distribution of college students by race. Although the black population in Florida is considerably larger than the Hispanic, the number attending college is almost the same—40,000 black students and 44,000 Hispanics in 1984, along with 5,500 Asian Americans and 15,000 foreign students. While cheering on the state for its Hispanic enrollment, we must urge more effort to find equity for blacks in the process. Black enrollments in Florida's community colleges have dropped steadily since 1977, while blacks in four-year institutions have remained steady since 1981. Hispanic enrollments have been up by about one-third for both two and four year programs since 1980. Whether the problem has been increased by larger numbers of black high school dropouts cannot be decided from the existing data. However, by recent efforts in the state to raise standards for high school graduation without providing equitable resources to help every child *attain* these higher standards, the Florida higher education system is vulnerable if the decline in black college enrollments continues.

The "every man for himself" philosophy was clearly seen in the late Sixties and Seventies in Florida higher education. Politics were extremely important in each institution's search for "greatness" (often defined as aquiring resources, not better teaching or research). Today, Florida may be thinking more about state priorities, and master planning is making more sense, particularly for the community college system. The major growth area in Florida education for the 1980's and 90's will continue to be adult/continuing education. As America deals with the problems of finding productive roles for our rapidly aging population, Florida higher education will serve as a national model for the development of effective programs.

It would be important for Florida to seize the initiative in developing effective programs for the *other* major player on the education scene—the rapid increase in minority youth. There is a master plan mentality in higher education that tends to ignore public schools. Efforts of many Florida leaders, including Robert Mautz and (then) Governor Graham, have helped citizens to begin thinking about Florida education as if it were a single system starting with pre-school and ending with graduate school (which, of course, it is).

The burdens that will be placed on Florida's education system in the next decade will be even greater than in the past, as *half* the children already born, but too young for school, have been born "at risk," with the cards stacked against them. At the same time, standards have been raised. Higher education in Florida can be no better than Florida's public schools. It is important for higher education leaders to work with the public school leadership in Florida, partially because it will result in greater enrollments for them later on. This is a very pragmatic, not a liberal position, defined by deToqueville as "self-interest, correctly understood." It is this spirit of enlightened pragmatism that should pervade Florida's educational system during the next ten crucial years.

FLORIDA—GENERAL CONCLUSIONS

Unlike Texas, California, Arizona and other high growth states, Florida is the only one in which growth *rates* may increase markedly in the next decade. (The move to the West was in part false confidence in the "Sun Belt" economy, while in fact the New England and Mid-Atlantic states showed the highest levels of increased per capita income from 1980-87, while the Sun Belt states led only in the percentage of business failures.)

Minority populations, although increasingly important in Florida life, will remain less than half of Florida's population for the foreseeable future, while in Texas and California, the children who will form a "minority majority" in those states have already been born. Florida, in many ways, has the best record of providing middle-class opportunities for blacks and Hispanics, in terms of small business starts, suburban residence and government jobs. The big youth issue is not race, it is *class*—a large number of children, close to half, come to the school with some kind of major detriment. If we expect the schools to solve all these social problems their students bring with them every day to school (and you can't leave your family at the school door), then schools will have to work harder just to stay even.

Schools *will* be at the center of the policy and implementation issues surrounding Florida's future. Higher education, business, and communities will all be affected by how well the schools perform. At present, high schools are graduating fewer students, fewer black students are found in community colleges, and far too many students get involved with drugs and crime. There is an urgency about the current situation. Here are a few suggestions for action:

1. Growth in student populations must be paid for "as you go" or earlier, keeping faculty-student ratios at the present level or lower. So far, Florida is the only state with increased enrollments which has *reduced* student-teacher ratios, from 19.9 in 1982 to 17.5 in 1987. An increasingly diverse student population will probably do better in smaller classes. The *worst* mistake for Florida would be to fudge on costs by increasing class sizes during the expansion, arguing that class sizes can be reduced "later." There is no "later" for educational expenditures during an expansion of enrollment.
2. Schools must deflect the increasing anxiety felt by senior citizens over limited service dollars for dependent older and younger citizens. There are many solutions to this problem, including locating programs for older people right in the school, encouraging senior citizens to tutor, etc. Last year, the author heard a woman at a Florida school board meeting draw thunderous applause by saying "Why should I be concerned about the education of someone else's children?" We need to convince that person that education is a *civic*, as well as parental, responsibility.
3. As the excellent *Priority Policy Issues* document suggests, one major focus needs to be placed on early childhood programs with a considerable amount of local direction and leadership. The same applies to school-based child care and drug education programs. While these initiatives are all very well drawn, it is not yet clear where they fit in the sea of priorities considered by the state as a whole. Certainly the *Sunrise Report* expresses major concerns for education issues. One thing to remember is that in discussions of children's education, children's health, housing, transportation, etc., it's the same kids who make use of these services. We tend to lose the clients in the bureaucracies which were set up to serve them.
4. Although the educational programs that will be needed are expensive, their costs need to be considered in terms of later services (prisons, drug detox centers, etc.) that will not be needed. If you think these programs will be expensive, try *not* having the programs and see what that costs. Florida business leaders need to understand and support public education.
5. Criteria for success need not be complex, in fact they arise naturally from the Department's *Priority Policy Issues*. Here are but a *few* examples starting with the number of children eligible for a pre-school success program involving parents compared to those for whom no program is available; keeping kids at grade level in the crucial first years of school; high school graduation and college-going rates particularly for poverty and minority youth; the development of truly useful occupational skills for the Florida economy; use of the GED and other devices to let people "back in" when they're ready to achieve; minority enrollments in colleges compared to minority *graduates*. These are not complex assessments, but they must add up to some central conviction about the future of Florida, and education's role in that future.

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FLORIDA: SUMMARY OF MAJOR POINTS

1. Florida has already experienced a major increase in its population of people and cars. But the "spin" of this growth has been to Florida, then Texas and Arizona, and thence to California, as the population has moved slowly south and west. However, today we see a reduction in the rate of movement to the west. *As the population center moves slowly west, the economic center of the U.S. is actually moving back to the east, because of economic difficulties throughout the "Sun Belt" and because of the rapidly improving economies in the New England and Mid-Atlantic regions.* This means one thing—the likelihood of even higher growth rates in Florida in the future, due in part to its well diversified economy. (Indeed, the future of Florida involves massive exchange of goods and services with other *nations* as well as the U.S. Florida will certainly have its own "foreign policy" in the next few years.)

2. Unlike many states, Florida's suburbs have grown without sucking the life out of its core cities. This is due to the fact that the state is so young, and is in many ways still being formed, that most things can grow at the same time. (In "mature" states like Pennsylvania, suburban growth seems to come at the expense of the core cities.)

3. Florida's history has meant expansion among the rich and poor, while the middle of the income distribution has not grown apace. The future of Florida's workforce will also emphasize a large number of low-level service jobs that pay very little and have little opportunity for advancement, along with a smaller number of jobs in technology and high-end services which have more potential.

4. Florida leads the nation in the number of cities in which black, middle-class populations are doing well, and also does very well in black suburban residence. Hispanics have also done well in small businesses and (especially) in local politics. However, there are some discouraging signs, such as the decline in black community college students over the last five years.

5. Florida crime rates are very high, and will probably continue to increase in the future, diverting even more resources from those that could provide services to children and the elderly. (One prisoner in jail for one year costs $24,000, enough to fund *eight* children in a Head Start program or send *three* students to a Florida public college or university for a year!)

6. Florida's elderly population will increase in numbers and in political influence, developing tensions between their need for resources and others, particularly education. By offering programs for the elderly on school sites, and by encouraging elderly to volunteer in classes, etc., schools may be able to show their value as a community center for elderly interests *before* hostility gets too great.

7. Florida's diverse set of institutions of higher education have passed through the "empire building" stage of the Sixties and have performed well in providing high quality education for Florida. A *very* high proportion of its students are part-time, suggesting a major commitment to the "non-traditional" student who is over 24, works and supports a family while going to college. Black and Hispanic college enrollments are about equal, even though there are many more blacks than Hispanics in the state's total population.

8. Florida's schools face increasing challenges in terms of continued expansion of school enrollments. In addition to school construction and teacher recruitment, additional costs will be generated by a larger number of students who come to school "at risk"—of the 60,000 new children added to Florida in 1987, 18,500 were in poverty, 5,200 were abused or neglected and 4,000 were handicapped. There is little doubt that educational investments in Florida will have to *increase* for each child if half will be coming to school from this kind of background.

9. Growth in Florida's population will be inexorable. Unless comprehensive, not segmented, planning is carried out in the state (and the *Sunrise Report* is an excellent example of what can be done), then quality of life will suffer for all. Florida, particularly, can learn from the mistakes of "older" states that are further along in their development and have less "running room," because they allowed their core cities to be depleted before taking action. If Florida can learn how to allow suburban growth without sucking the life out of its core cities, how to encourage reasonable housing expansion without damaging Florida's delicate ecosystems, how to increase the life chances for an increasingly diverse group of elderly and minority citizens, then Florida will be the leadership state of the year 2000.

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ARIZONA:

THE STATE AND ITS EDUCATIONAL SYSTEM

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THE INSTITUTE FOR EDUCATIONAL LEADERSHIP, INC.

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However, errors of fact and interpretation remain the responsibility of the author.

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COVER NOTE:

This "people map" of Arizona shows the two major metro areas in which live 75 percent of the state's population. This means that services are delivered to comparatively dense areas or very sparse ones in terms of population density. These two counties (Pima and Maricopa) will tend to dominate the state's political processes because of this rapid and sustained growth. Demographic maps like this one are increasingly used by planners, marketers of goods and services, politicians and even educators!

ARIZONA:
THE STATE AND ITS EDUCATIONAL SYSTEM

HAROLD L. HODGKINSON
Senior Fellow, The Institute for Educational Leadership

ARIZONA: THE STATE AND ITS EDUCATIONAL SYSTEM

There would *be* no Arizona without water and copper. The state has an abundance of the latter and almost none of the former. Indians discovered in approximately the 1300's that irrigation could allow for meaningful agriculture in what is now Arizona, the Salt River Dam demonstrated this anew for more modern times, and the Central Arizona Project (CAP) has completed the job in the 1980's. (Although most of the water is for agriculture, it is an "insurance policy" for further population growth as well.) The CAP is the last of the great federally financed Western water projects, as Senator Moynihan, who now chairs the Water Resources section under Public Works, has indicated in 1988. One reason: even though the *federal* cost per pint is very high, local water costs are so low that Arizona ranks 8th in per capita water consumption. In addition, heavy pumping of groundwater over many years has caused large fissures to develop in many parts of the state, a situation being dealt with by current policies of recharging a gallon of water back into the ground for every gallon taken out.

Through the years, Arizona has mined more than half of the copper ore dug in the U.S., and this was the mainstay of the economy through the first period of expansion during World War II and on to about 1975, when new forms of high and mid tech manufacturing increased rapidly in the Arizona economy.

A third major prerequisite for growth in the Arizona climate is air-conditioning, which made both Florida and Arizona livable after World War II. Driving through Phoenix on a 120 degree day in an air-conditioned car, looking at the air-conditioned houses with swimming pools in backyards, made possible by investing several billions of federal dollars in CAP, and realizing that a quart of water is *evaporated* for every quart used, one gets a sense of an artificial and vulnerable environment.

In terms of this fragile ecosystem, Arizona has had amazing growth rates since 1970. Most of the growth has occurred in the two counties of Pima and Maricopa, where 75 percent of its citizens live. (There are some long-term limits to growth—83 percent of Arizona land is owned by federal, state and Indian authorities, leaving only 17 percent for private development.)

Phoenix is now listed by most sources as one of the seven best places in the country for job growth, along with Los Angeles, New York, Dallas, San Francisco, Washington and Atlanta. (Scottsdale, a haven for homes for the wealthy an[illegible]ference centers for major American corporations, [illegible]ow one of the fastest growing cities.) Phoenix is the [illegible]ime example in America of a city whose growth has [illegible]ome through annexation. As a result, Phoenix has gone from a city of 17 square miles to over 375 square miles in 1988.

A major problem involves what happens to governments during annexation. During almost *120* separate annexations in Phoenix's history, many school boards have been retained. Thus, Phoenix operates through *28* individual school districts which are partially or totally in Phoenix's 375 square miles, a fairly unmanageable proposition. (An excellent 1983 report, *The Delivery System of Urban Education in Phoenix*, makes the point that if the city had not practiced boundary expansion, it would be a city of 28 mayors and 28 city councils!)

This enormous expansion of the city, by increasing its geography rather than increasing its density, has led to some major problems in the delivery of social services. In South Phoenix, a forty square mile area of poverty, delivery of services to the aged, sick and poor are very expensive on a unit cost basis, as it may be two miles between stops compared to Brooklyn with ten deliveries per block. Given the 375 square miles, and only plans for mass transit, the *car* density increases more than the people density. Ironically, air pollution in Phoenix is now so bad the city ranks tenth from the bottom in air quality, according to the Council on Environmental Quality. The swimming pools, lawn sprinklers and canals have, of course, increased air humidity a considerable amount, which allows pollutants to "hang." One wonders how long doctors will continue to recommend Phoenix as a haven for asthma sufferers! Add to that very high divorce and crime rates, and it is clear that there is much to do in Phoenix. Yet, it is also clear that, given the beautiful mountains, good jobs and lack of crowding, many more people will move to Phoenix in the next decade.

Tucson is smaller, cooler, and has maintained more of a Southwestern flavor than Phoenix. However, the mix of manufacturing and high technology is very parallel to that of Phoenix, and both are growing, Phoenix more rapidly than Tucson. Both cities have attracted a number

ARIZONA PROFILE

1980 Population	29th		2,718,000
1985 Population	27th		3,187,000
1987 Population			3,368,417*
1980 Black Population	29th	74,000	2.8%
1980 Hispanic Population	8th	440,000	16.2%
American Indian Population	3rd	146,461	5.4%
Asian Population		22,888	1.0%
Foreign Born	12th		6.0%
Born in Another State	4th		67%
Population Over 65 Years of Age, 1980	23rd		11.3%
Population Over 65 Years of Age, 1985	20th		12.3%
Under 18	19th		29.1%
Under 18, 1985	18th		27.5%
Median Age, 1980	32nd		29.2 years
Median Age, 1987			34.5 years
Women in the Labor Force	39th		47.8%
College Graduates	19th		17.4%
Birth Rate	9th		17.9 births per 1,000
Voted in 1984 Election	46th		45.5% of eligible voters
Married Couple Households	26th		62.2%
Median Household Income	27th		$16,448
Median Household Income, 1987			$29,473
People per Square Mile			23.9. (U.S. 64.0)
Increase in Personal Income, 1980-85	5th		+ 61% (U.S. + 47%)
Housing Value	13th		$61,900

*Data from C.A.C.I., 1987. All others 1980 unless otherwise noted.

of major high tech corporations, and both have excellent universities within the metro areas. Phoenix has Maricopa Community College, which supplies a vast number of programs and services and has a national reputation for excellence, as does Pima. Tucson has not developed as quickly as Phoenix has, and thus may have an easier time managing future growth, although infrastructure development will be difficult in both cities, especially mass transit. Also, like Santa Fe, Tucson represents "the real Southwest," and may increasingly attract tourists looking for the genuine article.

Although there is Sun City, most in-migrants to Arizona have been young, well-educated, and just moving into their peak earning years. The state is not becoming one vast retirement colony as some have suggested. However, poverty, illness and social pathology are not hard to find in the only state that refused to participate in Medicaid. Even Arizona's conservative politics have changed to a more balanced view of state and local responsibility for its citizens, mainly under the regime of former Governor Bruce Babbitt, a "home-grown" Arizona politician who had taken a swipe at the state's well organized crime

syndicates during his days as Attorney General. As this is written, however, the state's gubernatorial function is in great confusion, as Acting Governor Rose Mofford has taken over from Evan Mecham, who now faces a State Senate impeachment trial, a criminal prosecution and a recall election in May, 1988. Seldom is a political outcome so *totally* unpredictable.

One other factor makes Arizona unusual—20 million acres of the state are "owned" by the 13 Indian tribes living there. About 155,000 Indians (5 percent of the state's population) participate in the richly divergent tribal cultures, from Navajo to Hopi. Arizona ranks behind only California and Oklahoma in the numbers of Native Americans. They live mainly on reservations—only about 20,000 live in Phoenix or Tucson, while 70 percent of Mexican Americans live in those two metro areas. Blacks represent about 3 percent of the state's population while Hispanics are about 16 percent. With this as background, let's review the basic numbers seen on page 2.

This is clearly a high growth state, even though the growth is overwhelmingly in only two counties. The state's density of 23 people per square mile suggests infinite possibilities for growth, but this is a very misleading average. The density *range* in Arizona is vast, from *4* people per square mile in Apache, Coconino, Graham and Mohave Counties to *165* per square mile in Maricopa as of 1980. The low density counties are, of course, those in which land is not readily available for private purchase, being owned by state, federal or Indian authorities. Pima County, the other major growth center, has a density of 57 people per square mile and should be better able to handle growth than Maricopa, in this sense. (Before you think Maricopa's the ultimate, remember that New Jersey has an average density of 1,000 people per square mile, the same as Japan.)

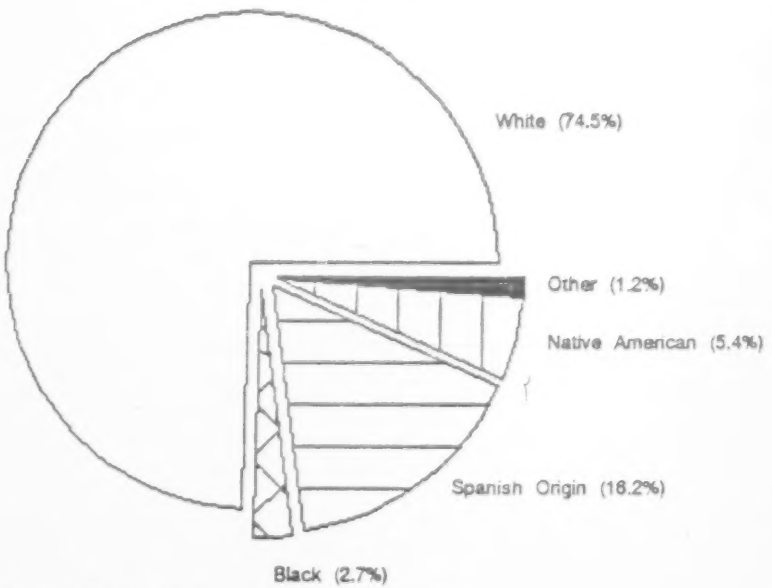
The state's ethnic mix is also unusual, with small Asian and black populations, and large Hispanic and Native American populations, totalling about 25 percent of Arizona's people. However, because whites in Arizona have a lower fertility level than Hispanics or Native Americans, Arizona *children* are about 40 percent non-Anglo, as the Graphs A and B indicate.

One of the central claims of demographics is that the children of today are the adults of tomorrow. That being the case, Arizona needs to consider a future in which 40 percent of the adult population will be non-Anglo. That future arrives (depending on in-migration) in the year 2000. Many Arizonans are from another nation—mostly Mexico—and most are from another state.

By age, the state has a relatively small but increasing population over 65, and a large population under 18, due partially to the higher fertility rates among Hispanics and Native Americans. The population contains a large number of college graduates, and newcomers to the state continue that pattern. (On the other hand, a very high percentage of youth drop out of high school, making Arizona high on well and poorly educated people.) One income problem is the rather small percentage of working women,

GRAPH A

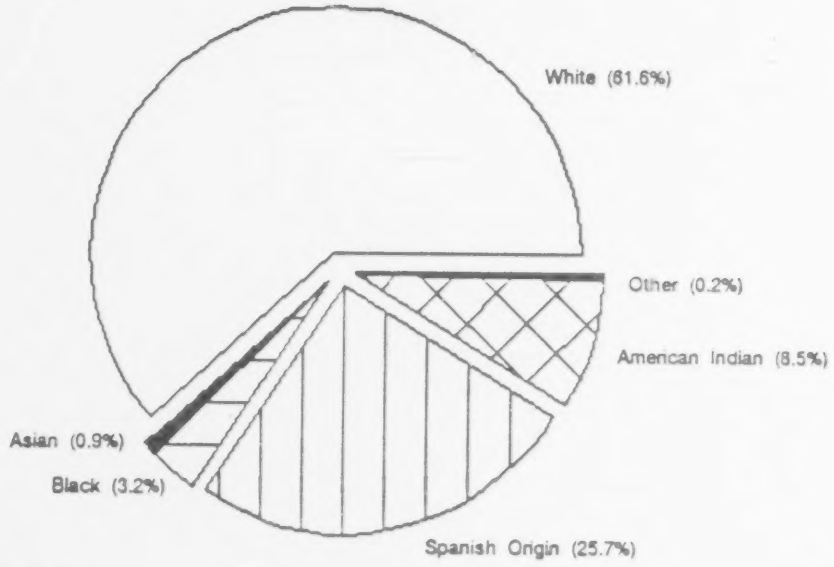
POPULATION DISTRIBUTION BY ETHNICITY
Arizona—1980



From Bartram and Gebel, *Arizona Educational Scan*, Arizona State University

GRAPH B

ETHNIC COMPOSITION OF THE 0–4 AGE GROUP IN ARIZONA 1980



From Bartram and Gebel, *op. cit.*

it being virtually impossible to live a middle-class life these days on only one salary.

It is also interesting that with all the college graduates in the state, and higher percentages of high school dropouts, a very small number of voters turned out for the last national elections. Are Arizonans focused inward, with more interest in local and state concerns than national issues? It's certainly a possibility. One of the things in Arizona's favor is the relatively low cost of housing, at least compared to other areas which offer good scenery, jobs and climate. That should speak favorably for the state in its effort to win the supercollider project—at this writing, Arizona is one of seven finalists to build the $4.2 billion particle smasher. However, the current gubernatorial confusion will work in the other direction, as will the environmental impact of a project of this magnitude.

Certainly a key element in this state is population movement. Although we normally assume that people only move *to* Arizona, that proves to be incorrect:

ARIZONA POPULATION MOVEMENT 1975-1980

	ALL	WHITE	BLACK	HISPANIC
IN	650,063	595,751	15,560	45,796
OUT	352,680	313,791	11,744	29,440
NET	297,383	281,960	3,816	16,356

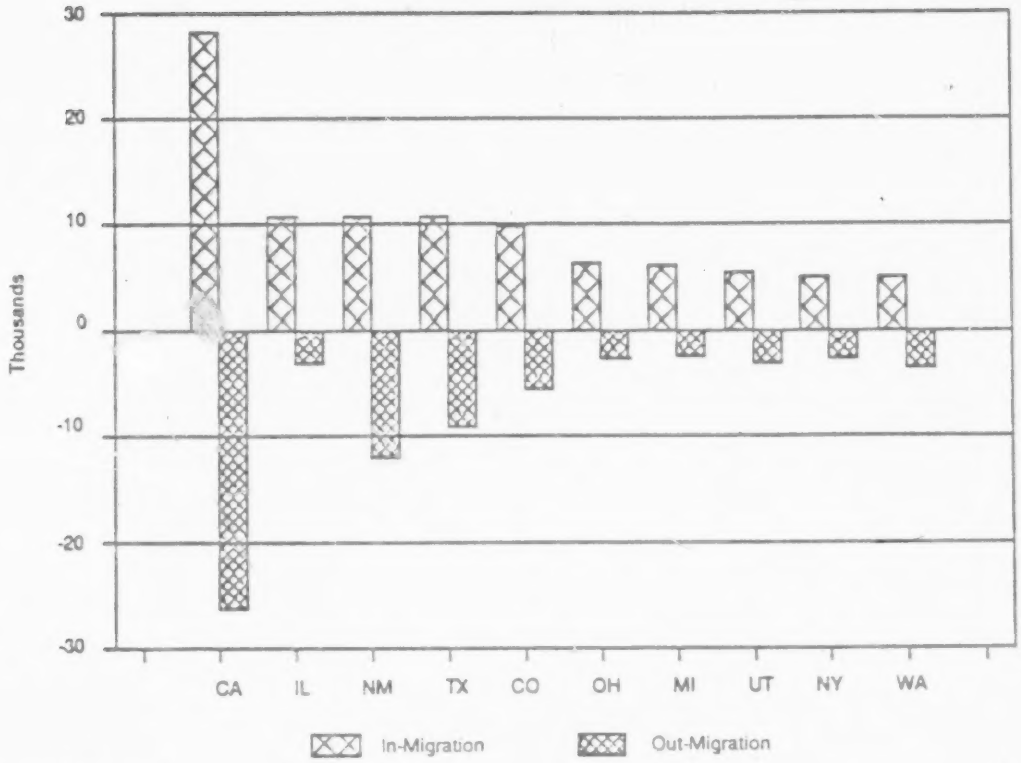
It should be clear that for every two people who move to Arizona, one person moves out. It is also clear that the overwhelming number of in-migrants are Anglo, and that a surprisingly large number of Hispanics move *out* of the state when compared to other states. Data on Phoenix in-migrants in 1983 suggested that they are young (median age 27.9 years), affluent (their houses were $12,000 over the Phoenix average), *32 percent* had attended college, 62 percent were married, 41 percent had children—an ideal profile in terms of family-oriented people just moving into their peak earning years.

We can also tell from which states these in-migrants come (see Graph C, page five). The largest action both in and out, is (in order) California, Illinois, New Mexico, Texas, Colorado, Ohio, Michigan, Utah, New York and Washington State, at least in 1984–85. Although 28,000 Californians moved to Arizona, 26,000 left Arizona for California, for a rather small "net" of 2,000. The only discrepancy in the "top five" is Illinois—11,000 Illinois citizens moved *to* Arizona, but only 2,000 moved from Arizona to Illinois. But in the "bottom five," Colorado, Ohio, Michigan and Utah all sent more people to Arizona than vice versa. Thus, the "net" represents more people in Arizona from Ohio, Illinois, Michigan, Utah and Colorado than from California, New Mexico and Texas.

One unique thing about Arizona is the degree to which suburbs look like the core city. A slice of Shaker Heights, Ohio will *not* look like a slice of downtown Cleveland,

GRAPH C

ARIZONA MIGRATION FLOWS FOR THE TOP TEN STATES 1984–1985

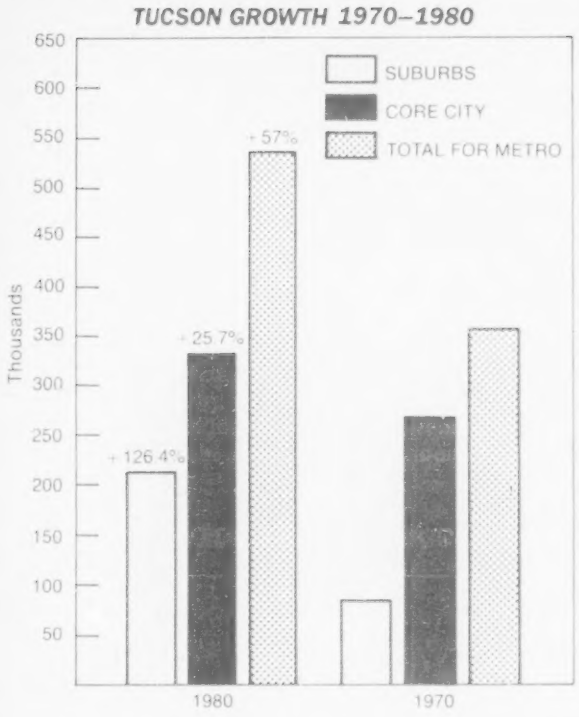


From Bartram and Gebel, *op. cit.*

whereas a slice of the city of Phoenix will look a great deal like a slice of suburban Phoenix. In the rest of the country (minus Florida), increasing suburban populations have meant declining city populations. In addition, *jobs* have moved to the suburbs as well—in Chicago, more than 50 percent of all commuters are going from a suburban home to a suburban job. The core cities of Phoenix and Tucson do not have this worry to the same degree, as the city has grown proportionately with the suburbs. (See chart on next page.)

Phoenix has also expanded suburbia without sucking the life out of the core city. However, in both metro areas, poverty is concentrated within the city limits (but remember, that's 375 square miles for Phoenix!). South Phoenix represents this new kind of low-density poverty area. Among the twenty plus school districts that operate within the City of Phoenix, there are striking differences in the amount spent per child, making consistent improvement throughout Phoenix public schools very difficult to achieve, as we shall see in a minute. Still, compared to other cities, the rebuilding job is easier in Phoenix and Tucson.

Phoenix is now the tenth largest *city*, but only the 22nd largest *metropolitan area*, due largely to the annexation process. In terms of Hispanic populations, however, Phoenix is the tenth largest city (116,000 Hispanic residents) but the thirteenth largest metro area, with about 200,000 Hispanics. This means that about 80,000 Hispanics live in "suburban" Phoenix, a rather large percentage compared to other cities. One of the good things about Florida and Arizona cities is that you can't tell where the city stops and the suburbs begin. Minorities, especially middle-income minorities, have many more housing alternatives in Arizona than in Chicago or Detroit, areas with *very* clearly defined suburbs and low percentages of minority residents. (On the other hand, moving to the suburbs may not increase one's social status if the suburbs are very like the city.) A key question here is the availability of well-paying jobs in various parts of the metro areas of Phoenix and Tucson, for Anglos and minorities as well. In the profile on page six, the first column indicates the percentage of the Arizona workforce employed in that industry, the second indicates the importance of



that area to the state's total economy, using 100 as the U.S. average.

This is the healthy profile of a nicely diversified economy. The only vulnerability is in the first category, with the heavy investment in mining which must now be partially converted to other areas. Still, this conversion will be easier for Arizona than the automobile conversion has been for Michigan, Ohio and Indiana. Across the high end of the service economy, the state does very well, as it does with construction, which also pays well. The 1987 data may show an upturn for manufacturing, although Honeywell, Motorola, Sperry-Rand, and Hughes Aircraft have not added many new positions lately—the name of the "high tech" manufacturing game is *jobless growth*. (In addition, the *average* worker in a high tech manufacturing firm is a stock runner, shipper, clerk, secretary, cashier or security guard. In Silicon Valley, only 20 percent of the workforce has any advanced technical or scientific training.) The problem of a "declining middle" in the Arizona workforce is real, if one looks at the jobs people *actually do* at present. (See chart on next page.)

If we look at the future, Arizona will create 12 new jobs for cashiers for every *one* job for computer programmers. The consequences of those numbers for the state's tax base, for the educational system, and quality of life, are vital. Arizona's past has been unplanned worship of the great god, growth. In the future, Arizona will have to *plan*

ARIZONA BUSINESSES AND JOBS

	% OF WORKERS	INDEX
AGRICULTURE, MINING, FORESTRY, FISHING	5.3	133
CONSTRUCTION	8.1	137
MANUFACTURING	14.5	65
TRANSPORTATION, COMMUNICATIONS	6.6	90
RETAIL, WHOLESALE TRADES	22	108
FINANCE, INSURANCE, REAL ESTATE	6.9	115
BUSINESS, REPAIR, PERSONAL SERVICE	9.7	115
PROFESSIONAL SERVICES	20.1	99
PUBLIC ADMINISTRATION	6.6	125

Jobs in Arizona*	
Chemists	700
Dentists	1,300
Computer programmers	3,700
Finance managers	4,000
Lawyers	5,000
Doctors	5,400
Janitors	32,000
Secretaries	41,500
Fast food workers	58,900

*"*Occupational Outlook Quarterly*, Bureau of Labor Statistics, January, 1987

its growth far more carefully to assure equitable access to a high quality of life for all its citizens. We in education love to talk about the best educational program for the future computer programmer—but what is the best education for the future cashier? The question seldom comes up.

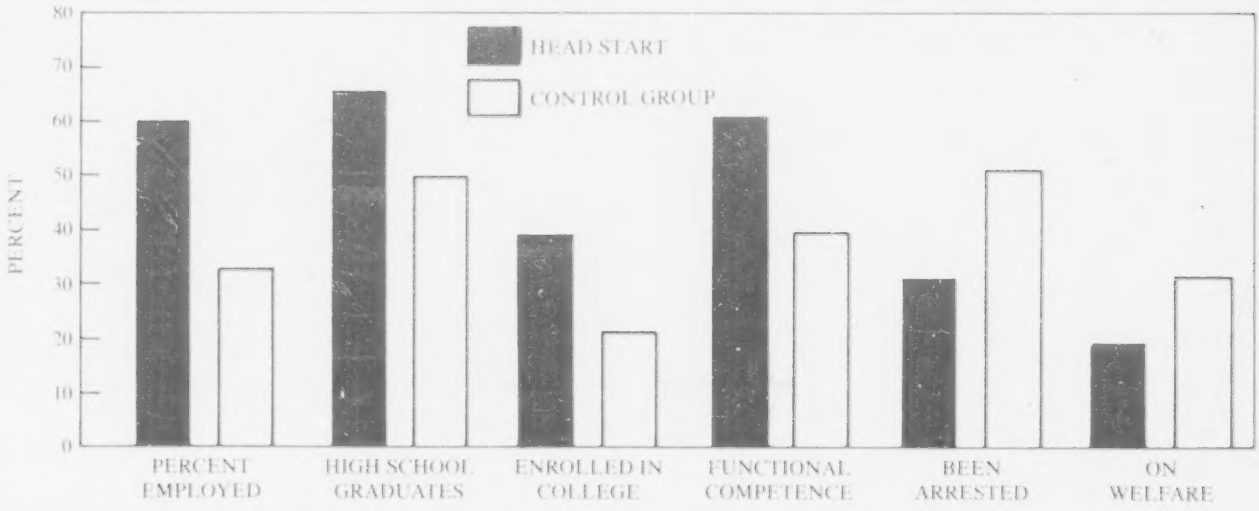
Although no one knows exactly where new jobs come from, the research of David Birch and others supports the importance of new small businesses as *the* single best source of new jobs. (The Fortune 500 do not add jobs to the U.S. economy, they are in the business of *eliminating* jobs.) Each year, about one million new businesses are created in the U.S., to the envy of the rest of the world. Of this pool, about five percent, according to Birch, will suddenly expand and begin to generate large numbers of new jobs. The largest number of these new businesses are in the service sector, broadly defined as non-manufacturing, non-agriculture. Neither Phoenix nor Tucson are leaders in small business starts, particularly *minority-owned* small businesses. Unless some action is taken, Arizona will continue to develop twelve jobs for cashiers for every job for a computer programmer, and will be behind in developing middle-class minorities.

An additional problem concerns the fact that Hispanics in Arizona have usually performed the onerous tasks that had to be done but don't pay well and have few opportunities for advancement (hotel maid, cashiering, retail sales, garbage collection, janitor, waiter/waitress, night watchman). Hispanics' recent rise in political clout in Arizona suggests that the future may be different, and that, via the educational system, more minorities will move into middle income jobs, breaking the stereotype of the "servant class." The development and maintenance of middle-class minority populations would contribute greatly to the social and economic benefit of *all* Arizonans.

A final comment about the state's demographics. Sixty-seven percent of the state's population moved in from another state; 6 percent from another country (mainly Mexico), leaving only 27 percent of the state's residents who were born there. This kind of transiency is exceeded only by Nevada (about 20 percent of residents born in the state), and in both states is responsible for very high crime rates, and perhaps for the low national election turn-outs. (Nevada is now number one in terms of murder per 100,000 people.)

Arizona was *2nd* in overall crime rates per 100,000 in 1985, 16th in murder with 10.3 cases per 100,000 people, 9th in rape with 45 cases per 100,000, and 16th in robbery with 193 per 100,000. The state is now 10th in prisoners (175 per 100,000 in 1980, 267 per 100,000 in 1985), a major financial drain on a state that is strapped for income for social services anyway. A prisoner costs about $22,000 a year to maintain, which taken times 8,500 total prisoners gives the large total of 187 million dollars a year just to maintain the prisoner popu-

HEAD START CHILDREN AT AGE 19



From High/Scope Foundation, Ypsilanti, Michigan, 1984

lation. Although Arizona will have to build some new schools in the future, it seems likely that it will build more jails, given the sharp increase in criminality. During the last decade, America increased jail populations more than almost any other human factor.

Certainly education is involved in this trade-off, as 80 percent of prisoners in the country are high school dropouts. This does not mean that if we graduate everyone from high school we could close all the jails, but it *does* mean that if quality of the educational system declines further, prison populations are likely to continue to increase. One prisoner for one year costs as much as eight children in Head Start-type early childhood programs, a program with *demonstrable* ability to deter youngsters from a life of crime, get them through school and into a good job. (See chart on page 8.)

In Arizona, there are about four times as many Head Start eligible kids as there are places in programs. It would seem that the state will have a return on this *lack* of investment, also.

Having now taken a snapshot of this fast-moving state, let's move on to look at the educational system.

ARIZONA'S EDUCATIONAL SYSTEM

The first thing we notice is that Arizona's schools have increased in enrollment, but not in proportion to the state's total growth:

Phoenix, however, the increases in kids brought major increases in complexity.

All indications are for a proportionate increase in school enrollments in Arizona's future, with one exception: the Phoenix Union High School District and "family" of 13 feeder school districts will continue to *lose* students, while the suburban districts around Phoenix will continue to gain, as suburbs show more rapid (and economically wealthy) growth in population. This will mean that schools will increasingly be in one place, children in another. Poverty will increase in Phoenix "city" schools rather than in the suburbs. There will probably be more schools that become segregated due to population movement. This rather gloomy prediction could be upset if the rapidly building coalition of leaders from Phoenix Union High School District, Arizona State University, Phoenix businesses and Mayor Goddard becomes effective in dealing with these issues in a *comprehensive* way. Phoenix need not become what many of our largest cities are today.

Although these issues will also exist in Tucson, the problems will be less, due to smaller enrollments and a slightly more comprehensible system of school districts than is true in Phoenix. (Although they enroll small percentages of students, a word needs to be added about the number of elementary districts in Arizona with very *small* enrollments and low teacher salaries and dollars spent per student. Rural poverty is a problem for some of Arizona's children, on the reservation and off. Within Phoenix schools, assessed valuation per student ranges from $10,031 to $346,125 in two different districts.)

ARIZONA SCHOOL ENROLLMENT, SELECTED YEARS

	1970	1982	1985
ALL	440,000	510,000	596,200
Grades K-8	314,000	359,000	420,600
Grades 9-12	126,000	151,000	175,600

While the state grew about 88 percent from 1970-1985, the schools grew by only 35 percent. While minority students are now about 33 percent of school children, they are *40* percent of children age 0-4 at the present time, due to the higher fertility rate among Native Americans and Hispanics. (On the other hand, Phoenix Union High School District is now over 50% minority enrollment, but that is in contrast to 76% minority enrollment as an average for America's 20 largest cities.) During the 1970-1982 period, American schools were losing 13 percent in enrollment. During this period, Arizona (and Florida) were *adding* students. It was not a particularly good time for passing school bond issues, yet Arizona managed to increase school capacity almost as quickly as it increased *revenue* capacity, allowing for "pay as you go" school increases. In

There are some things about the Arizona school profile on page 9 that leap out at one. First, the increase in Arizona students was handled by reducing the amount spent per child. A real danger will be making classes larger. California has worked itself into a terrible hole by increasing class size to 23, the next largest in the nation. Arizona is not in this drastic a fix, but the continuous increase in new students will require new efforts to keep class sizes down and to provide equitable funding levels for *each* child. The next ten years may represent a more formidable challenge in meeting the needs of new students than the last ten.

Second, considering the large number of college graduates and middle-income people in the state, the retention rate to high school graduation is unimpressive, to say the least. (Part of this may be due to an unusual state law

ARIZONA SCHOOL PROFILE

	1973–74	*1985–86*
Per-pupil expenditure	$ 1,057 (U.S. $ 1,147)	$ 2,829 (U.S. $ 3,677)
Teacher Salaries	$10,807 (U.S. $11,690)	$24,680 (U.S. $25,257)
Funding: Federal	8.2%	10.0%
State	38.6%	53.3%
Local	53.2%	36.7%
Percent of 1980 ninth graders graduating in 1984:	69.8% (40th)	
Per capita income, 1984	$11,841 (U.S. $12,789)	
Student-teacher ratio, 1985	19.7 to 1 (U.S. 18.3 to 1)	
1980 Private school enrollment	40,261	
Catholic schools	18,306	
Other private schools	21,955	
Children in poverty (age 5–17)	15.8% (U.S. 15.3%)	
Pre-school children in poverty	21.2%	
Handicapped students, 1984	9.8% (U.S. 11.0%)	
Gifted students, 1984	3.9% (U.S. 3.2%)	
Bilingual students, 1984	2.3% (U.S. 2.9%)	
Minority students, 1984	37.7%	
Black	3.8%	
Hispanic	21.5%	
Asian	1.1%	
Native American	11.3%	

allowing students to leave school at their 16th birthday or after completing the *10th* grade. It is hard to consider this law to be in the state's long-term best interest, in that it functions to *increase* the high school dropout rate, a situation from which no one benefits.) In addition, the increasing poverty rates among Arizona's very young children suggest a further increase in school dropouts unless specific action is taken.

A third major change is in public school funding, a majority of which now comes from state sources and only a minority from local revenues. In this regard, Arizona is simply mirroring a national trend. However, in a state with great differences among school districts, state policies will have to be mediated through some series of local filters. The Golden Rule is still in operation—he who has the gold makes the rule. It is unrealistic to expect state lawmakers and governors to provide the money for schools but leave the policymaking to local leaders. In a state like Arizona, there may be increasing stress between state and local leaders on education issues in the future, and the current gubernatorial confusion could only make matters worse. In Arizona, the most important question may be—who decides who decides?

The percentage of poverty among children in Arizona seems much too high for such a favored state. In addition, poverty is increasingly concentrated in cities and rural areas, while suburbs are increasing in upper, middle-class income levels. While minorities have moved to the suburbs (Hispanics, at any rate), it is not clear whether the job structure in the state provides for an increasing number of middle-income jobs that are held by minorities, nor does the educational system seem bent on accomplishing this task. Increasing the poverty levels of minority youth will be in no one's self-interest. The creation and support of middle class minority populations will be a major factor in the state's future potential, and the educational system will have to be a key player, both schools and higher education.

While private schools enroll about 13 percent of America's youth nationally, they only enroll 6 percent of Arizona's youth. (This seems to be characteristic of the Southwest as a whole, not just Arizona). Although the data cannot be tracked in Arizona, it is interesting that the schools who are members of the National Association of Independent Schools are now enrolling as many Asian students as they are blacks, leaving Hispanics somewhere

in left field. Another interesting factor is the very low number of Arizona students in bilingual classes. One explanation is that most of the bilingual program dollars have come from the federal government, a funding source Arizona has been dedicated to *not* using. Another speculation might involve the attitudes of many Arizonans who may want *all* instruction in English and none in Spanish, Hopi or Navajo.

Given the state's history of total commitment to growth and laissez-faire capitalism, it is understandable that schools were not a primary priority in Arizona's past. However, as one looks at Arizona's *future*, it becomes increasingly clear that an educated citizenry and workforce will make or break the state. If minority populations remain outside of the middle class in large numbers, the state's future will be in major jeopardy, as no state can survive long if 40 percent of a generation (the current minority proportion of young children in Arizona) are unable to fulfill their potential. Equity is not a matter of liberal rhetoric but a *pragmatic necessity*. Investment in jails at $24,000 per prisoner per year is a very major investment, the return on which is very low. The return on the education dollar is incomparably higher. Failing to make the educational investment will mean further increases in the prisoner investment. (Eighty percent of prisoners are high school drop-outs).

Oklahoma currently graduates *80 percent* of its youth to Arizona's 69 percent. Could Arizona move its retention level up to that of Oklahoma? Definitely. It would not take a huge amount of money, but it would require the state to develop a *youth policy*, something it does not currently have, as well as a strategy for implementing that policy. The important thing to remember is that Arizona education is a direct product of the state's economic, social,

ARIZONA HIGHER EDUCATION

Number of institutions (1985-86)	31	
Public institutions	19	
Private institutions	12	
Universities	3	
Four year institutions	10	
Two year institutions	19	
	1970	*1985*
Total enrollment	109,619	216,854
Public enrollment	107,315	202,036
Private enrollment	2,304	14,818
Full-time enrollment	*	95,642
Part-time enrollment	*	121,212
Minority enrollment, 1984	34,666 (17% of all enrollments)	
Black	5,952	
Hispanic	18,028	
Asian	3,672	
Native American	7,014	
Foreign	4,957	
Average faculty salary, 1985–86	$34,116 (U.S. $32,392)	
Bachelor's degrees awarded, 1984	11,370	
Arizona students out of state for college, 1984	4,674	
Others migrating to Arizona for college, 1984	14,478	
Net gain,1984	9,804	
Public higher education appropriations per FTE student, 1986	$ 3,398 (rank 31st)	
Appropriations for current operations, 1986	$388,700,000 (public)	

political and demographic context. Understanding this context is a necessary prerequisite for understanding how the educational system functions.

ARIZONA HIGHER EDUCATION

It goes without saying that Arizona higher education can be no better than Arizona's schools. Like the schools, higher education is also a creature of the state's economy, politics, social norms and demography. (See chart on p. 10.)

Although Arizona public institutions are dominant in enrollment, it is worth pointing out that independent institutions tripled their enrollments during the period. Public institutions doubled enrollments, a much larger increase than the public schools. Compared with national figures, a far higher percentage of Arizona students are part-time, suggesting that serious attention is being paid to the needs of older students who need additional education for occupational advancement. In addition, the minority percentage is commendable, given that about 20 percent of the high school graduates are minority in Arizona. However, in 1986, 78,594 minorities were enrolled in the state university system, and 124,851 were enrolled in the community college system. The Arizona universities could clearly do better. Just as Arizona attracts tourists, it also attracts students from other states! The combination of scenery, climate and the perceived quality of the three state universities is a compelling one.

Although funding for higher education is not even by enrollment, especially at the three universities, it has avoided the enormous swings up and down that have characterized the California community college system as well as others. Public institution faculty have salaries a little above the national average, just as Arizona public school teachers are a little below the U.S. average. Although it is inferential, it would seem that the awarding of 10,000 bachelor's degrees by the state universities in 1985-86, and 5,000 associate degrees in the same year is to suggest a rather high attrition rate in both sectors. (Nationally, about 46 percent of undergraduates receive a B.A. degree "on time," four years after they begin. There are few indications of what "normal progress toward the degree" means in the community college context of 40 year-old students who are mid-career executives with families, going to college part-time.)

In general, the higher education system seems to be fairly well articulated with the public schools, and to some extent with the state's needs for job training and retraining. The three universities and the community colleges have good reputations, both within and without the state. As the state's population continues to grow, it will bring in many people who already possess a college degree but who will need additional education for new job tasks, as well as many people who need to complete a degree begun elsewhere. Adult education will continue to be a "growth industry" in Arizona, although there may be some tension as to who will offer such instruction. Change in the Arizona higher education system can be evolutionary, as things seem to be functioning well and the state's needs are being met.

ARIZONA—GENERAL CONCLUSIONS

Growth has been *the* name of Arizona's game. Because the people moving in have been young, well-educated and well-paid, the state has been able to increase its economic numbers based on its in-migrants, overlooking the fact that for many minorities and poor born in the state, things were getting worse. Today there seems to be a shift toward a broader set of concerns for the quality of life of all Arizonans, based on pragmatic judgments, not liberal economic or political theory. In addition, Arizona (when it finally gets a new governor) may be ready to do more strategic thinking and planning to *guide* change rather than to sit back and watch. To a large degree, Arizona and Florida are the only growth states in which the *rates* of growth are likely to continue at present levels, as Texas and California decline in growth rates. Although the ecology of Arizona is extremely fragile, there seems to be a new sense of the importance of stabilizing the ecological and human infrastructures.

A number of issues remain before the state:

1. So far, suburban growth has not been purchased by sucking the life out of the core city. However, poverty levels in "downtown" Phoenix are now increasing rapidly, jobs are moving to the suburbs, and the strategy of annexation will soon reach its own limits to growth. One has to begin thinking of the future of the Phoenix *metro area*, and Tucson to a lesser extent. Scottsdale represents a different problem—few lower income people live there, yet there is much work to do—cleaning hotel rooms, cashiering, janitoring, etc. But many of the people who do this work cannot live in the community in which they work. For the state, an increasing problem concerns low-income people travelling long distances to work in high income communities to which they can never belong.

2. The state also needs to stimulate more small business starts on the part of its current citizens, especially minorities. The decline in the middle of the Arizona work force is real, with increasing numbers of jobs on the high and low income sides. Considering the state's rank of *fourth* in the percentage of its citizens who are Hispanic, it needs to do much more in the development of minority middle classes. (Here Florida is far ahead of Arizona, with Miami leading the *nation* in the percentage of blacks and Hispanics who are middle class in income, and large number of minority owned businesses throughout the state).

3. Youth poverty will increase, and the number of young people involved in Head Start–like programs may decline as a percentage of those eligible. More youth entering school will be "at risk," which could result in even further reductions in the numbers of young people who graduate from high school. If this happens, *everyone's interests in Arizona* will be affected negatively. Native Americans and Hispanics, the two groups increasing as a percentage of all youth, have the lowest rates of high school graduation. Unless action is taken, the mathematics will work out inexorably.

4. Higher education needs to be articulated with the public schools. At the moment, some tentative first steps have been made, but mainly through the schools of education at the universities, and through community colleges. It is now time to get the "hard core" liberal arts faculty involved in the process of producing their future students through the public schools. (Higher education in Arizona can be no better than Arizona's schools.) At the moment, Arizona's business leaders seem to have a better understanding of this obvious fact than some of the professoriate.

5. As school populations increase during the next decade, care must be taken that class sizes not increase, and that funding per student does not decline. Also, the schools and the legislature need a *youth policy* that can guide action in this area, particularly in a state with an increasing percentage of youth who come from non-Anglo backgrounds. Minority populations increase less rapidly in Arizona than in California, Texas or Florida, and much can be learned by watching how those states deal with providing an effective education for *all* young people. A particular Arizona issue concerns the great richness of the many Indian cultures in the state, and how (if at all) this diversity can be protected while all students get an education that will help them fulfill their potential.

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ARIZONA: SUMMARY OF MAJOR POINTS

1. Growth has been the name of the Arizona game, and every indication is that it will continue for at least a decade longer. Like Florida, growth in Arizona has increased the fragility of human and natural systems. Most of the Arizona growth has been concentrated in Pima and Maricopa Counties, where about three-quarters of the population reside.
2. Growth, especially in Phoenix, has been dealt with simply by expanding the city limits from 17 to 375 square miles through a process known as annexation. Thus the city grew, but densities of people per square mile stayed about the same. Today, Phoenix has some areas of great poverty and very low density, which means that services are expensive to provide when it's two miles between stops.
3. Suburban growth in both Phoenix and Tucson has been achieved without destroying the core city, which has grown along with the suburbs. That process is now slowing down, and poverty is increasing in the city limits of both Phoenix and Tucson but not in the suburbs. There are limits to growth, in that over seventy percent of Arizona's land is owned by governments—U.S., state and Indian.
4. Contrary to expectations, the Arizona population is not very old, and birth rates in the state are high, particularly for Hispanic and Indian residents who form the largest minority groups in the state, with smaller black and Asian populations. The people are either very well-educated (high percentage of college graduates) or poorly educated (high percentage of high school kids who drop out). The majority of Arizonans were born in another state, contributing to a sense of transiency. Crime rates are also very high in Arizona, and the budget for prisoners is likely to expand faster than the budget for new schools.
5. Minorities in Arizona have not developed substantial middle classes, as they have in Florida and California, as measured by small business starts, suburban housing or middle-income jobs. The public schools, the higher education system and Arizona business leadership can make a good start on this crucial task.
6. The Arizona economy is nicely diversified (the major key to a state's ability to ride out a recession), and the conversion from a dependency on copper mining has shifted to increases in mid and "high tech" manufacturing and high end services—financial, legal, business and technical, to name but four. However, there are still too many jobs that pay very little. For every job the state generates for a computer programmer, it generates about *12* jobs for cashiers. Increasingly, these poorly paid service workers—hotel and personal maids, janitors, security guards and clerks—will not be able to live in the communities where they work, which can create major social tensions.
7. Arizona's minority populations are now forty percent of the small children in Arizona. The state must make sure that *every* child gets a good education and a chance at a good job. If forty percent of Arizona's youth get a bad start and cannot contribute their best to the state's economy, the lives of every state resident will be diminished. This is not liberalism but pragmatism—both liberals and conservatives can agree on the necessity of maximizing educational benefits in order to increase the state's economic potential.